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OUALITY CONTROL BOARD LOS ANGELES REGION

EVALUATION OF POTENTIAL ONSITE SOURCES OF CONTAMINATION IN VADOSE ZONE AT MONADNOCK COMPANY FACILITY IN CITY OF INDUSTRY, CALIFORNIA

PHASE 2B

Prepared for:

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February 1992

The soil sampling and analysis program described in this report and the resultant boring logs were conducted/prepared under the supervision of Mr. Joseph Frey, a California-certified engineering geologist. Mr. Frey has considerable experience in the conduct of soil and ground water investigations. His signature and stamp appear below.

Joseph Frey

Certified Engineering Geologist

Number 1500

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EVALUATION OF POTENTIAL ONSITE SOURCES OF CONTAMINATION IN VADOSE ZONE AT MONADNOCK COMPANY FACILITY CITY OF INDUSTRY, CALIFORNIA

1.0 INTRODUCTION

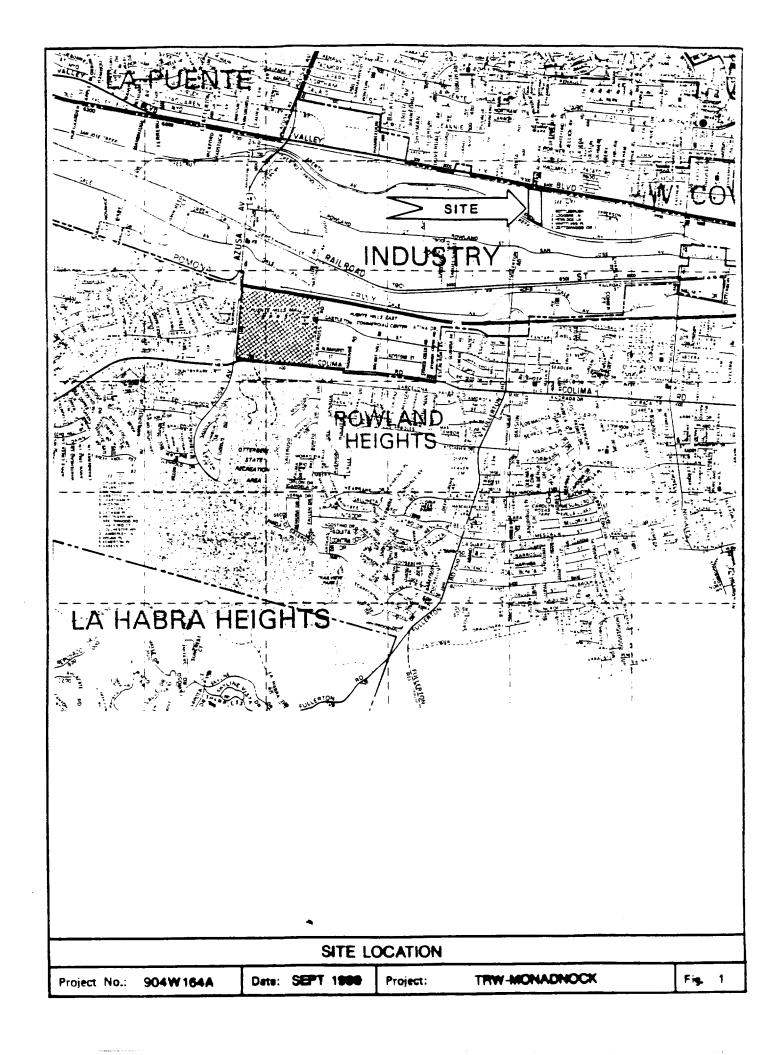
The California Regional Water Quality Control Board - Los Angeles Region (RWQCB) has determined that discharges of solvents and other chemicals have occurred from the Monadnock Company facility, located at 18301 East Arenth Avenue in City of Industry, California (see Figure 1 for site location). Specifically, the RWQCB, in Cleanup and Abatement Order 88-2 (dated May 11, 1988), stated that the following actions have or could have caused soil and/or groundwater contamination at the site:

- o Cleaning of equipment with solvents in an unpaved area of the site
- o Occasional dumping of used chemicals on the ground
- o Potential spills or leakage from chemical storage
- o Potential leakage from sumps, drains, piping, and an industrial waste clarifier

TRW Inc. (TRW), as a condition of the amended Cleanup and Abatement Order 88-057 issued by the RWQCB (dated September 29, 1989), is required to "determine any other contamination sources in the vadose zone on site (at the Monadnock Company facility) and evaluate threat to groundwater from residual contamination." To accomplish this goal, TRW has chosen to use a phased approach, whereby (1) potential sources of contamination in the vadose zone are identified (Phase 2A) and (2) having identified the potential sources of contamination, the lateral and vertical extent of contamination is evaluated (Phase 2B).

The Phase 2A investigation was conducted by Woodward-Clyde Consultants (Woodward-Clyde) in August 1990. A report of the investigation, entitled "Evaluation of Potential Onsite Sources of Contamination in Vadose Zone at Monadnock Company Facility City of Industry, California," dated October 1990, was submitted to the RWQCB in October 1990.

The Phase 2A investigation focused on potential vadose zone contamination from volatile organic compounds (VOCs), the specific metals historically used at the facility, acids and bases, and cyanide. To evaluate potential zones of soil contamination, soil gas sampling and near-surface soil sampling and analysis techniques were used. Areas of suspected VOC contamination were



surveyed using soil gas sampling and confirmatory soil sampling and analysis; areas of suspected toxic metal or cyanide contamination were evaluated using near-surface soil sampling and analysis.

Based on the concerns of the RWQCB and the previous chemical storage/usage patterns at the Monadnock Company facility, Phase 2A soil gas surveying was conducted in the following areas:

- o Sewer line from clarifier to street
- o Clarifier
- o Former vapor degreasers and associated floor drains
- o Area upgradient (to the east) of Monitoring Well MW-3
- o Concrete/asphalt interface south of building
- o Area adjacent to southwest corner of building
- o East parking lot area
- o Area adjacent to southeast corner of building
- o Alleged former swamp area
- o Former drum storage area at southeast corner of building
- o Former drum storage in bermed area along midsection at east end of building
- o West side of building between dock storage area and southwest corner
- o West dock storage area along paving/dock interface
- o Former underground storage tank location at east perimeter of property.

Results of the Phase 2A soil gas survey are as follows:

- o Sewer Line from Clarifier to Street Elevated concentrations (up to thousands of parts per billion) of 1,1,1-trichloroethane (TCA), trichloroethene (TCE), and tetrachloroethene (PCE) were detected in soil gas samples collected from this area.
- o Clarifier Concentrations of TCA, TCE, and PCE up to tens of parts per billion were detected in soil gas adjacent to the clarifier. Woodward-Clyde suggested that these concentrations probably represent migration of soil gas from other source areas at the site.
- o Former Vapor Degreasers and Associated Floor Drains Subsurface soil beneath the present degreaser area within the building contained significantly-elevated concentrations of TCA, TCE, and PCE in the soil gas (up to tens of thousands of parts per billion).
- o Area Upgradient of Monitoring Well MW-3 Somewhat elevated concentrations of TCA, TCE, and PCE (up to thousands of parts per billion) were detected in soil gas from the area upgradient of Monitoring Well MW-3. Woodward-Clyde believed that these concentrations may not indicate that subsurface soils beneath the area upgradient of Monitoring Well MW-3 have been impacted by localized spills of TCA, TCE, and PCE. Rather, soil gas originating from the sewer line may be migrating toward the area upgradient of Monitoring Well MW-3.
- o Concrete/Asphalt Interface South of Building Elevated concentrations of TCA, TCE, and PCE (up to thousands of parts per billion) were present in soil gas along the concrete/asphalt interface south of the building.
- Area Adjacent to Southwest Corner of Building and Alleged Former Swamp Area Significantly-elevated concentrations of TCA, TCE, and PCE (up to tens of thousands of parts per billion) were detected in soil gas collected from the area adjacent to the southwest corner of the building and in the alleged former swamp area to the south of the southwest corner of the building.
- o East Parking Lot Area Concentrations of TCA, TCE, and PCE up to hundreds of parts per billion were detected in soil gas in the east parking lot area. Woodward-Clyde believed that these concentrations probably represent migration of soil gas from other source areas at the site.

- o Area Adjacent to Southeast Corner of Building Elevated concentrations of TCA, TCE, and PCE (up to thousands of parts per billion) were present in soil gas proximate to the southeast corner of the building.
- o Former Chemical Storage/Usage Areas Concentrations of TCA, TCE, and PCE up to hundreds of parts per billion were detected in soil gas in the following former chemical storage/usage areas:
 - Bermed area along outside east wall of building
 - West side of building between dock storage area and southwest corner
 - West dock storage area along paving/dock interface
 - Pavement line south and east of building
 - Heat treatment room and adjacent former laboratory

Woodward-Clyde believed that these concentrations probably represent migration of soil gas from other source areas at the site.

o Former Underground Storage Tank - Concentrations of TCA and PCE up to tens of parts per billion were detected in soil gas in this area. Woodward-Clyde believed that these concentrations probably represent migration of soil gas from other source areas at the site.

Near-surface soil sampling and analysis conducted by Woodward-Clyde during August 1990 indicated that subsurface soils along the west dock area have been impacted by cyanide, chromium, and cadmium.

As a result of these findings, Woodward-Clyde included a work plan in the Phase 2A investigation report for conduct of the Phase 2B investigation. As mandated by the RWQCB (meeting on December 3, 1990; letter dated March 14, 1991; letter dated May 17, 1991; and letter dated June 21, 1991), the work plan was amended several times to reflect concerns of the RWQCB. The scope of work of the Phase 2B investigation conducted by ID Environmental Associates (IDEA), as described in the following sections, reflects the concerns of the RWQCB.

2.0 SCOPE OF WORK

The objective of the Phase 2B investigation was to better define the lateral and vertical extent of VOCs, cyanide, chromium, and cadmium in the subsurface soils at the Monadnock Company site. The extent of VOCs in subsurface soils was evaluated using a two-phased approach. To complement the data collected in the Phase 2A investigation, a second soil gas survey was conducted within each area of potential VOC contamination identified in the Phase 2A investigation. Soil gas data from the Phase 2A and 2B investigations were then used to locate soil boring locations. Soil samples were collected from within each boring and chemically analyzed to evaluate the lateral and vertical extent of VOC contamination at the Monadnock Company site. The areas in which cyanide, chromium, and cadmium contamination were identified were further evaluated using similar soil sampling and analysis techniques.

2.1 Soil Gas Survey

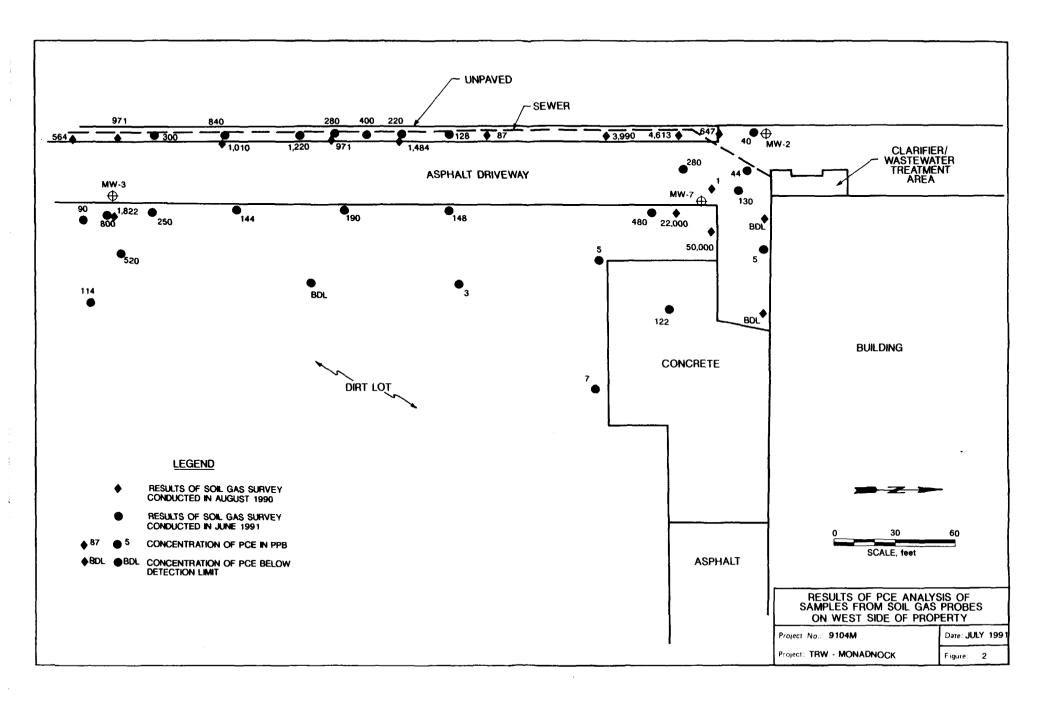
Soil gas sampling is used as an aid in broadly delineating the zone of subsurface materials containing elevated concentrations of volatile constituents. Used in this way, soil gas sampling is an effective, relatively non-disruptive technique to quickly identify the general extent of subsurface materials containing elevated levels of VOCs. This information can then be used to more effectively locate soil borings.

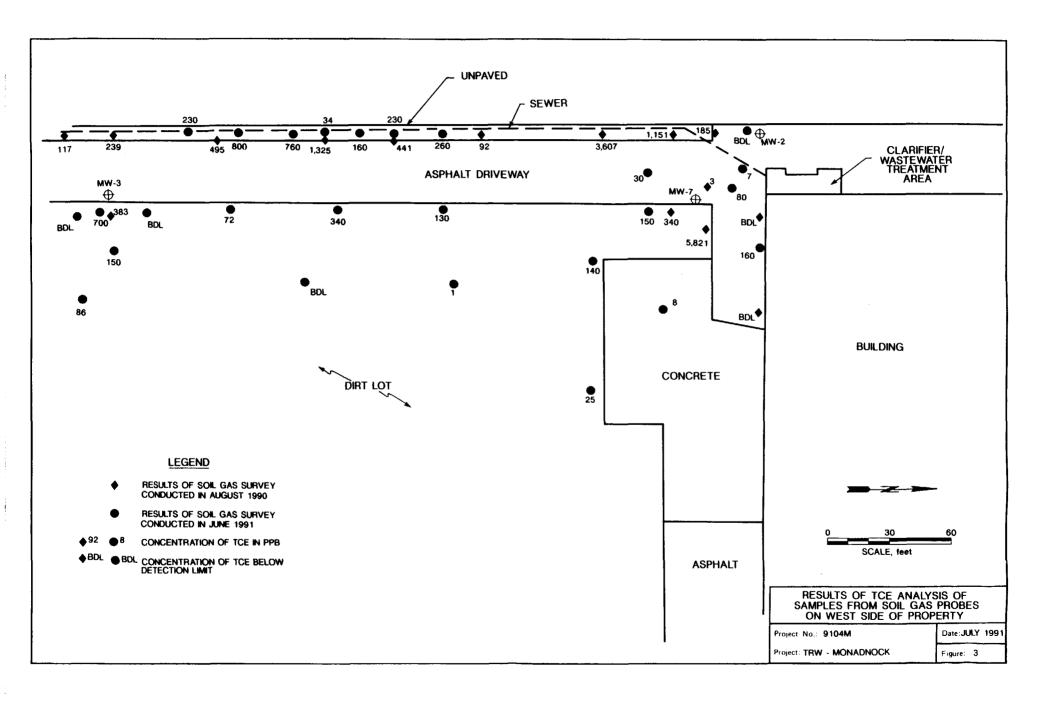
The following subsections outline the locations at which soil gas probes were placed during the Phase 2B investigation. Initial probe placement within each potential VOC contamination zone was guided by the data collected during the Phase 2A investigation. Subsequent probes within each zone were located based on the data from previous probes (probes were placed in areas that soil gas appeared to be migrating; no further soil gas work was conducted in areas of low soil gas VOC concentrations).

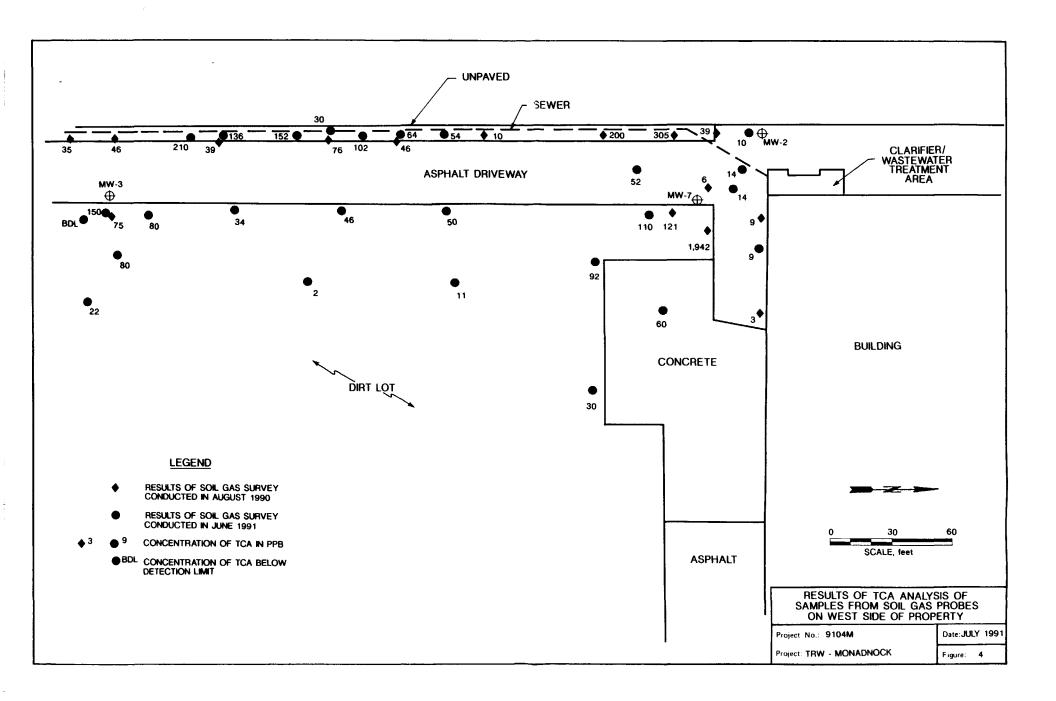
Protocols under which the soil gas survey was conducted are included in Appendix A. The locations of the probes (and the locations of the probes placed during the Phase 2A investigation) are shown on Figures 2 through 13.

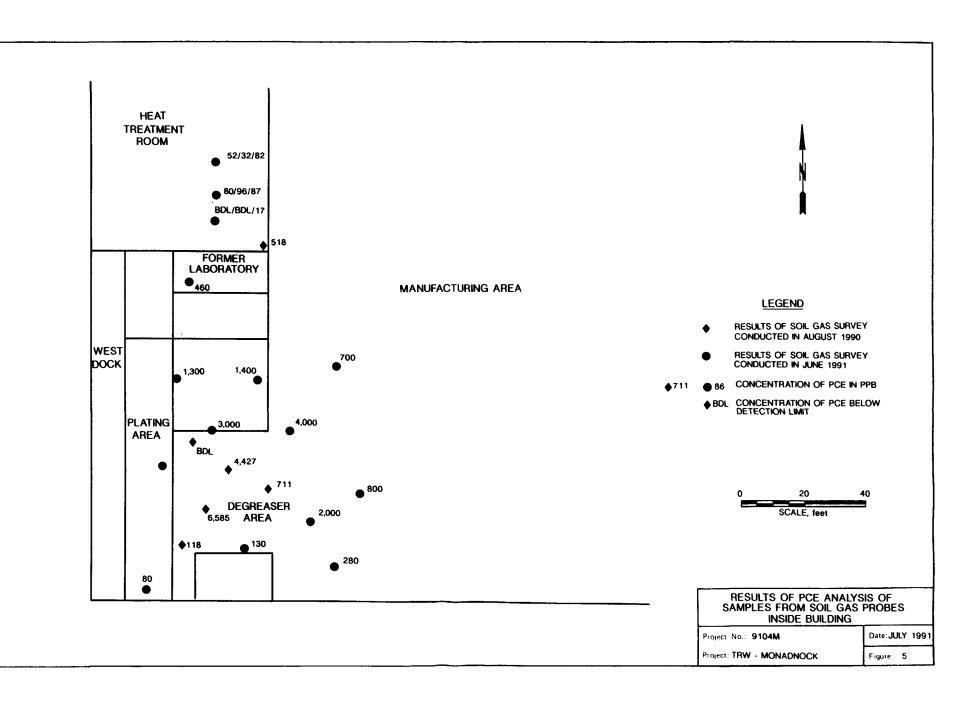
2.1.1 Sewer Line from Clarifier to Street and Monitoring Well MW-3

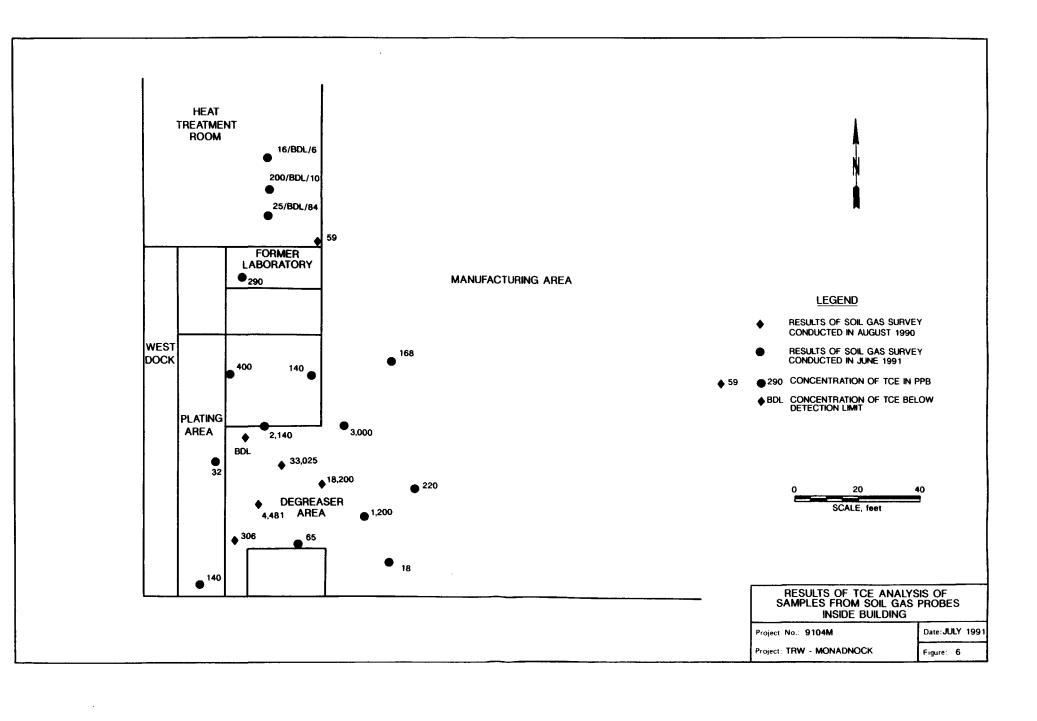
Two areas along the sewer line that runs from the clarifier to the main trunk line adjacent to Arenth Avenue and the area surrounding Monitoring Well MW-3 were identified during the Phase 2A investigation as possible VOC contamination zones. Accordingly, 17 probes were placed in these areas during the Phase 2B investigation.

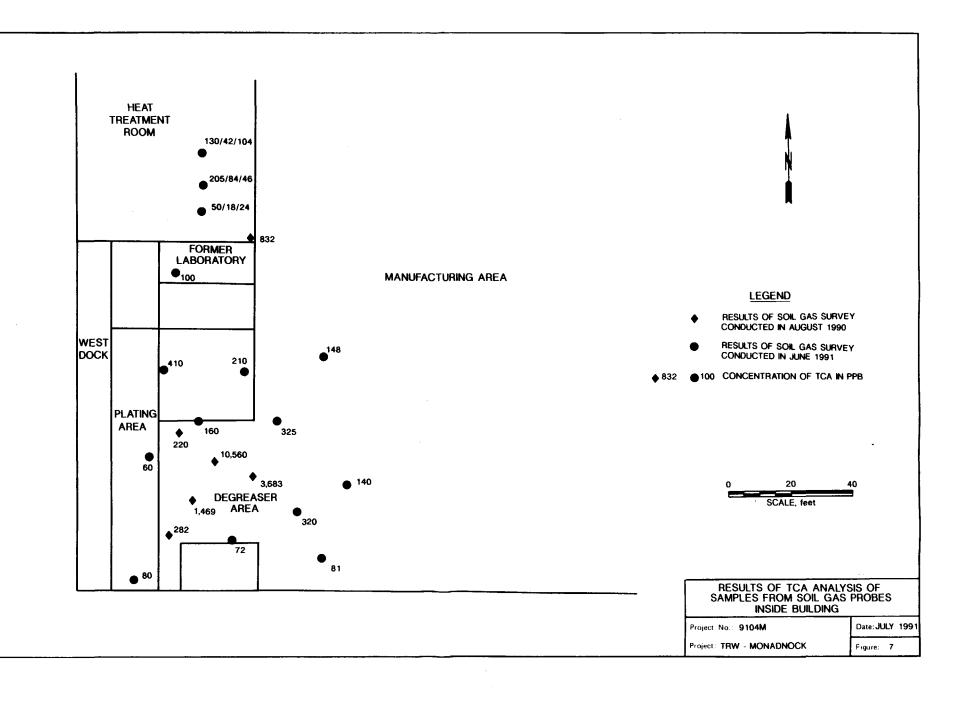


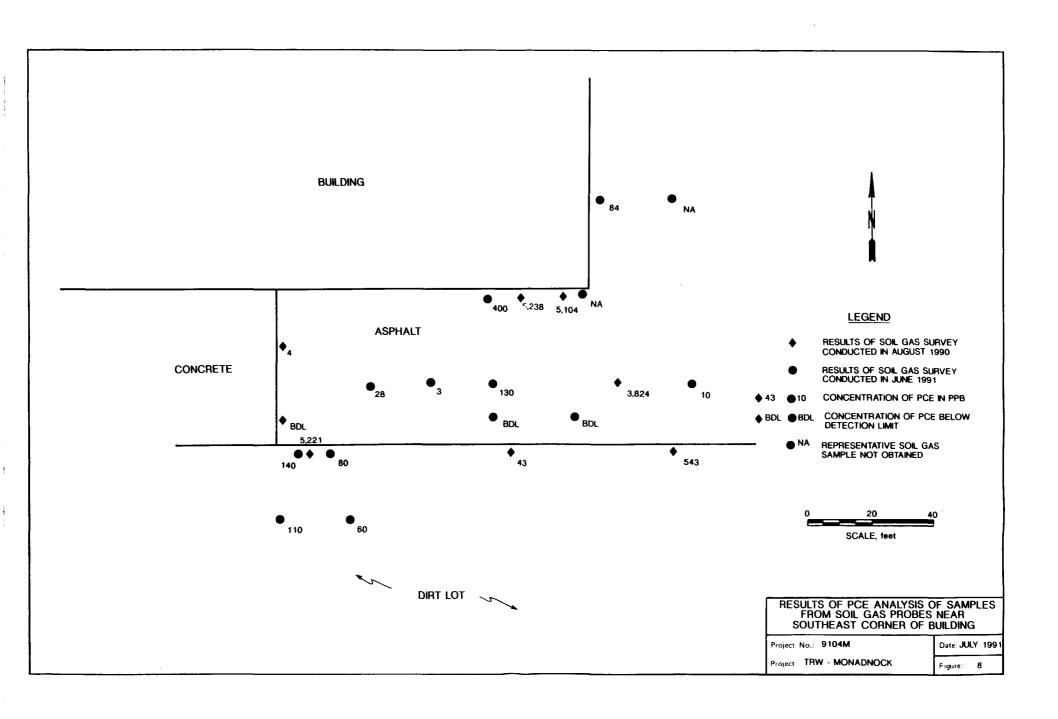


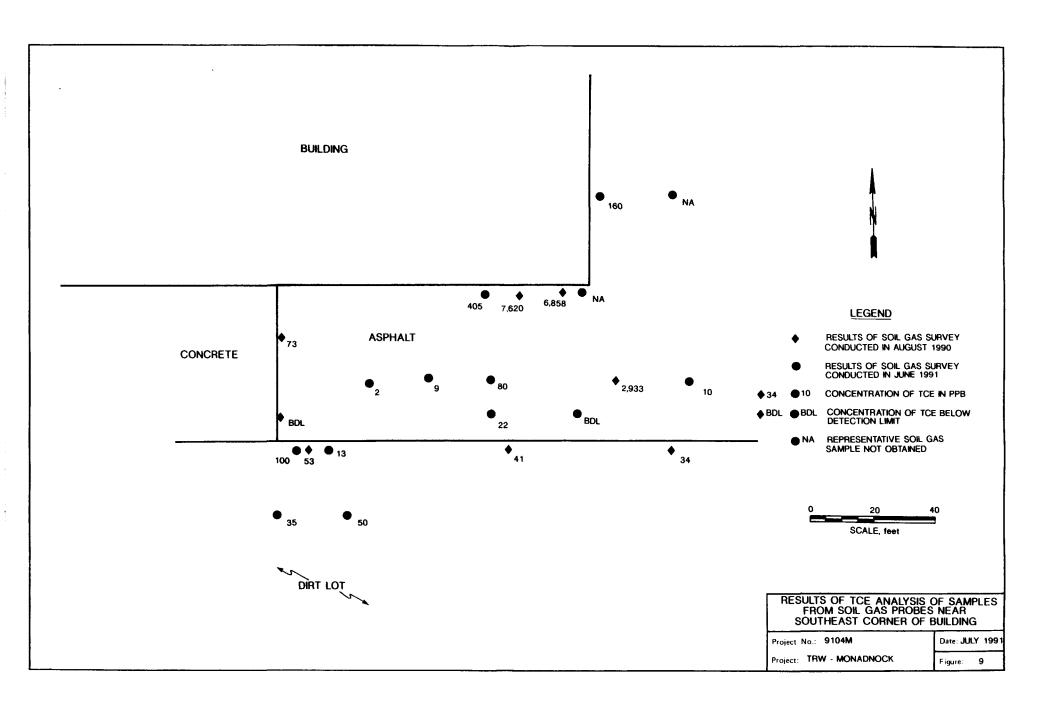


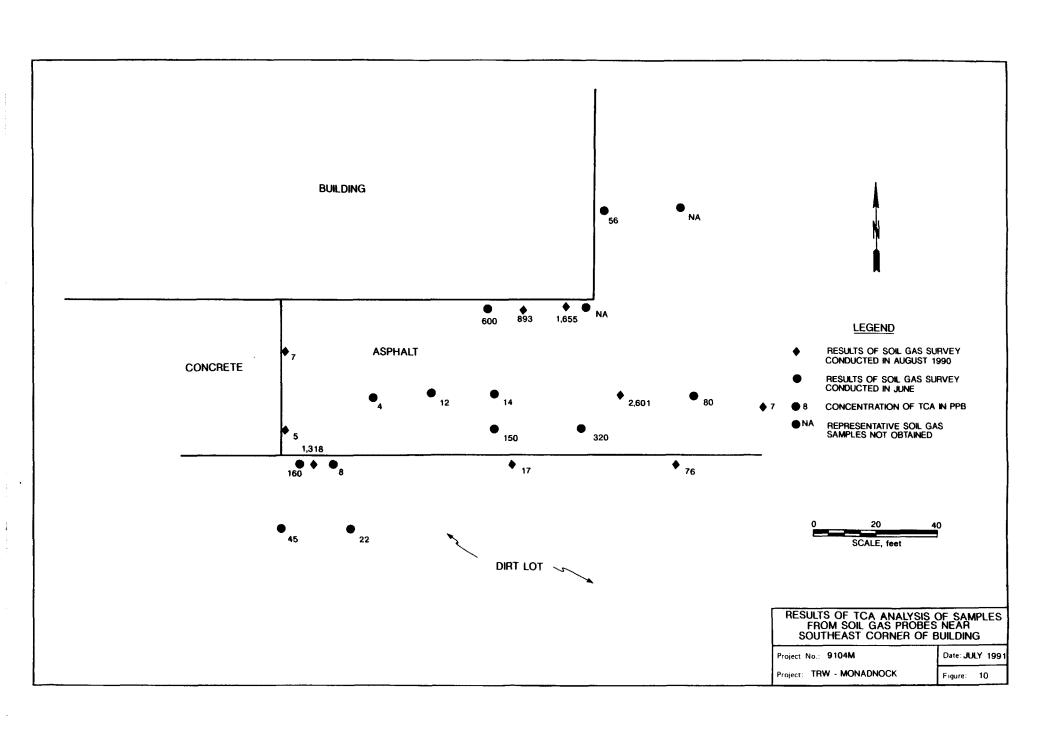


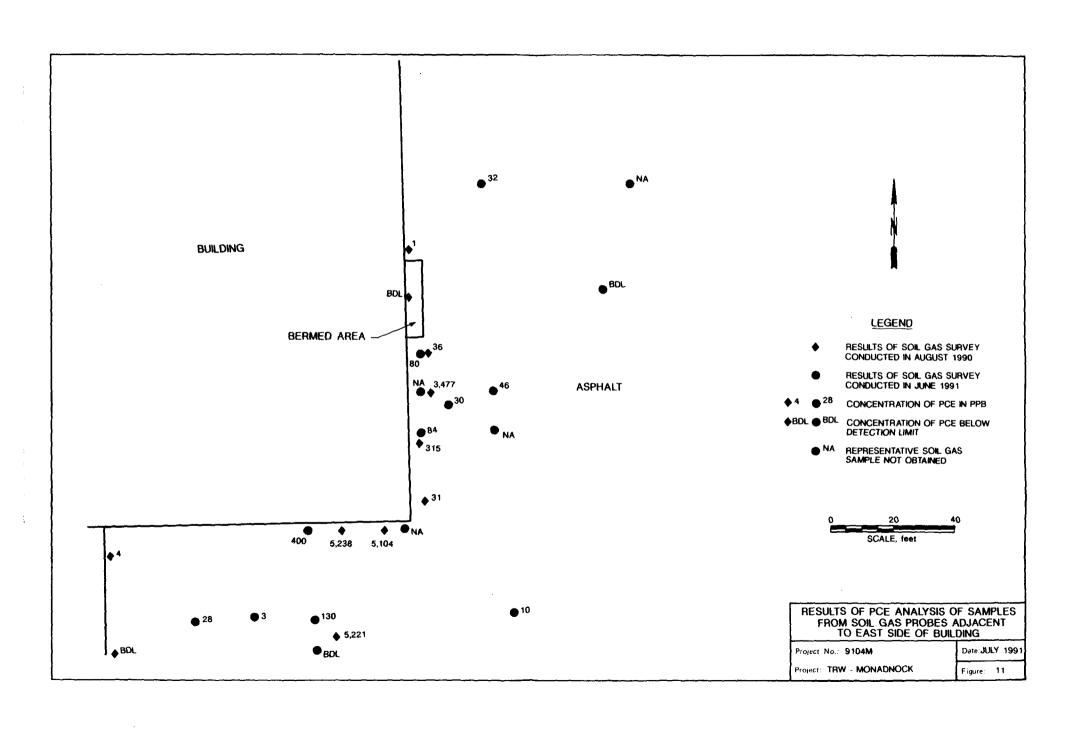


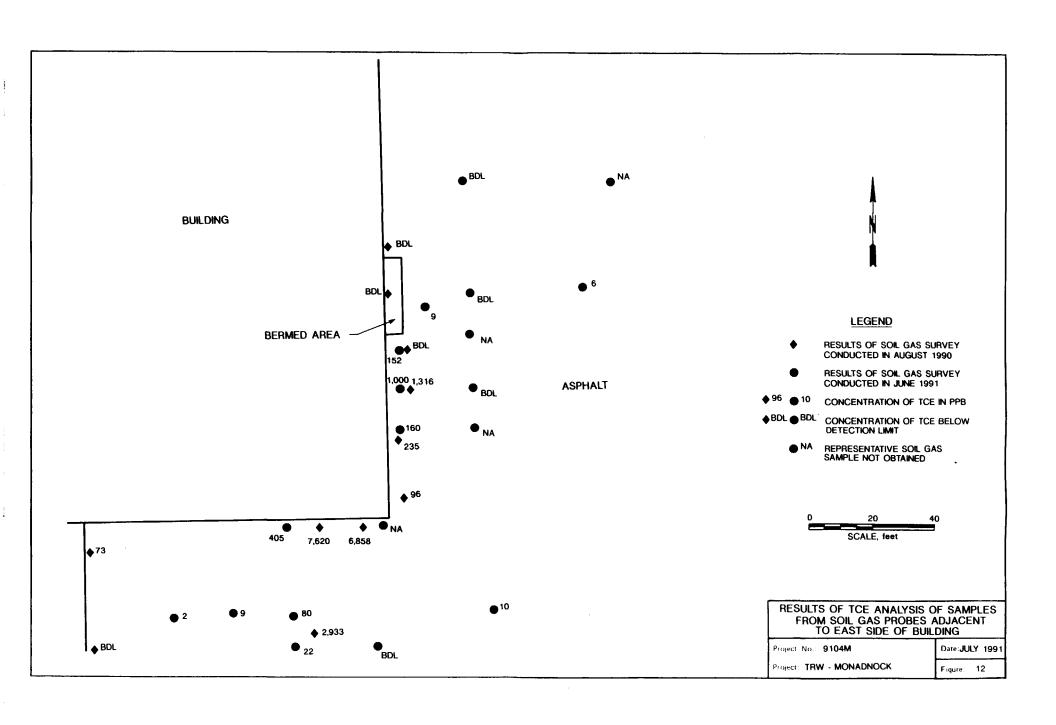


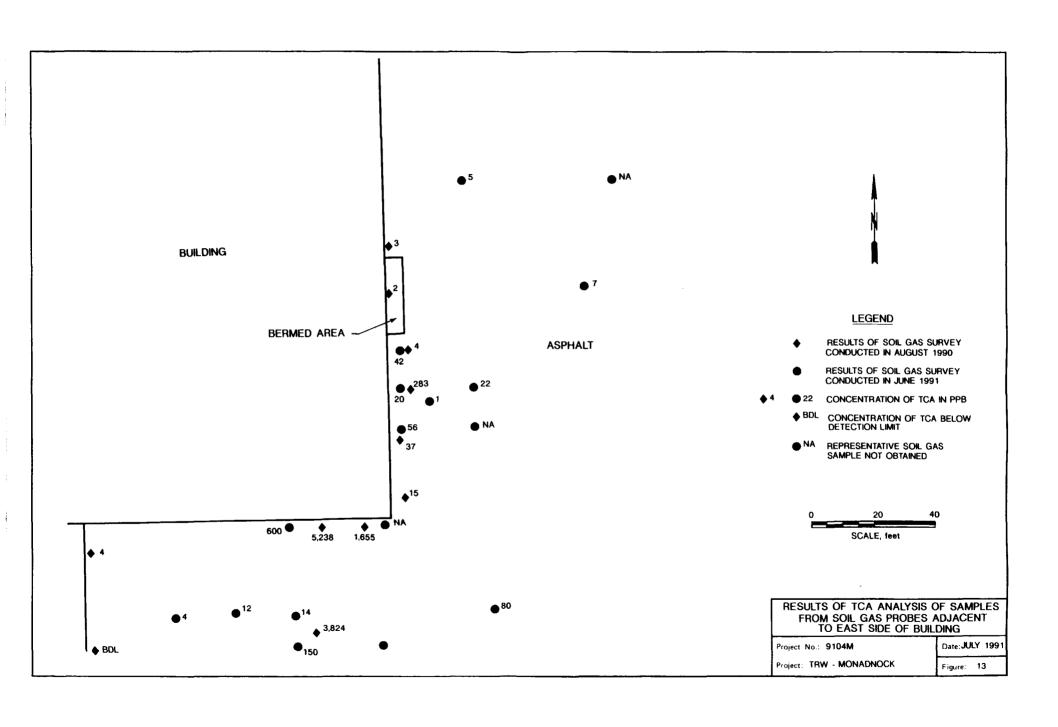












2.1.2 Area Adjacent to Southwest Corner of Building, Including Alleged Former Swamp Area, and Clarifier

The area adjacent to the southwest corner of the building, including the alleged former swamp area, was identified as a potential VOC contamination zone during the Phase 2A investigation. To evaluate this premise, nine probes were placed in the area during the Phase 2B investigation.

As a result of the Phase 2A investigation, Woodward-Clyde suggested that TCA, TCE, and PCE detected in soil gas adjacent to the clarifier probably originated at the former swamp area and/or the sewer line. To test this hypothesis, two of the nine probes were placed between the clarifier and these areas during the Phase 2B investigation. The purpose of the probes was to obtain sufficient data to evaluate if migration of soil gas is occurring from either of the areas toward the clarifier.

2.1.3 Former Vapor Degreasers and Associated Floor Drains

During the Phase 2A investigation, subsurface soil beneath the present degreaser area contained significantly-elevated concentrations of TCA, TCE, and PCE in the soil gas (up to tens of thousands of parts per billion). Nine probes were placed in this area during the Phase 2B investigation to further evaluate the extent of potential VOC contamination in the subsurface soils.

In its October 1990 report, Woodward-Clyde suggested that soil gas is migrating from the degreaser area toward the heat treatment room. Consequently, as part of the Phase 2B investigation, three probes were placed in intervening rooms. In addition, three probes were placed at multiple depths (approximately 4, 8, and 12 feet below the floor surface) in the heat treatment room.

2.1.4 Concrete/Asphalt Interface South of Building

Previous sampling during the Phase 2A investigation indicated that VOC contamination may be present along the concrete/asphalt interface extending south from the southern loading dock. Accordingly, five soil gas probes were placed in this area during the Phase 2B investigation.

2.1.5 East Parking Lot Area

Based on the results of the Phase 2A investigation, Woodward-Clyde believed that the concentrations of TCA, TCE, and PCE (up to hundreds of parts per billion) detected in soil gas in the east parking lot area probably represent migration of soil gas from other source areas at the site. To evaluate this premise, two probes were placed in the east parking lot area during the Phase 2B investigation.

2.1.6 Area Adjacent to Southeast Corner of Building

Soil gas probes were installed in the area adjacent to the southeast corner of the building during the Phase 2A investigation. Because elevated concentrations of TCA, TCE, and PCE (up to thousands of parts per billion) were detected in the soil gas proximate to the southeast corner of the building, seven probes were installed in this area during the Phase 2B investigation.

2.1.7 Former Chemical Storage Areas

Organic chemicals are reported to have been stored or used historically in the following areas:

- o Bermed area along east wall of building
- o West side of building between dock storage area and southwest corner
- o West dock storage area along paving/dock interface
- o Pavement line south and east of building

To evaluate potential VOC contamination in these areas, soil gas probes were placed in these areas during the Phase 2A investigation. Concentrations of TCA, TCE, and PCE of up to hundreds of parts per billion were detected in the soil gas. However, Woodward-Clyde believed that these concentrations represent migration of soil gas from other source areas at the site.

The RWQCB concurred with this hypothesis for the latter three areas. However, because of lingering concerns regarding the bermed area outside the east wall of the building, one probe was placed in this area during the Phase 2B investigation.

2.1.8 Former Underground Storage Tank Location

Concentrations of TCA and PCE of up to tens of parts per billion were detected in soil gas in this area during the Phase 2A investigation. However, Woodward-Clyde believed that these concentrations represent migration of soil gas from other source areas at the site. Because the RWQCB concurred with this belief, no further work was done in this area during the Phase 2B investigation.

2.2 Results of Phase 2B Soil Gas Survey

Results of the Phase 2B soil gas survey are shown on Figures 2 through 13. The results of the Phase 2A soil gas survey are also shown on these figures.

A comparison of results of the soil gas surveys indicates that the concentrations of TCA, TCE, and PCE in soil gas decreased from the time of the Phase 2A investigation to the time of the Phase 2B investigation. This phenomenon is especially noticeable along the sewer line and the southwest and southeast corners of the building. IDEA believes that surface water infiltrated subsurface soils in these areas (substantial rain was recorded in southern California during March 1991), resulting in a lowering of concentrations of organics in the soil gas. Lending credence to this theory is the fact that concentrations of TCA, TCE, and PCE did not significantly change in soil gas beneath the former degreaser area. This area, being beneath the manufacturing building, is protected from surface water intrusion.

Based on (1) historical site use data (presented in the October 1990 Woodward-Clyde report) and (2) the results of the soil gas surveys conducted during the Phase 2A and Phase 2B investigations, soil boring locations were located from which soil samples were collected and chemically analyzed. Details of the soil sampling and analysis program are provided in Section 3.0.

3.0 SOIL SAMPLING AND ANALYSIS PROGRAM

To evaluate the lateral and vertical extent of VOCs, cyanide, cadmium, and chromium in subsurface soils at the Monadnock Company site, soil samples were collected and chemically analyzed. The following subsections describe the soil sampling and analysis program.

3.1 Locations of Soil Borings to Evaluate Potential VOC Contamination

Based on historical use data for the site and the results of the Phase 2A and Phase 2B investigations, the following areas were identified for inclusion in the soil sampling and analysis program:

- o sewer line and area adjacent to Monitoring Well MW-3
- o southwest corner of building and alleged former swamp area
- o southeast corner of building and bermed area along east wall of building
- o degreaser area inside building
- o pavement line south of building

Soil boring locations, shown on Figures 14 through 16, were chosen using the following criteria:

- Organic chemicals and/or wastes had been historically used or stored in an area. Boring locations were chosen to evaluate potential VOC contamination in subsurface soils within the area.
- Significant concentrations of VOCs were detected in soil gas within an area. Boring locations were selected to assess potential VOC contamination in subsurface soils at (1) the location of the highest concentrations of VOCs in the soil gas of an area and (2) the edge of the suspected VOC plume within the area. The edge of the suspected VOC plume was defined as the locus of points at which the concentration of VOCs in the soil gas was an order of magnitude less than the highest concentrations of VOCs in the soil gas for that area.

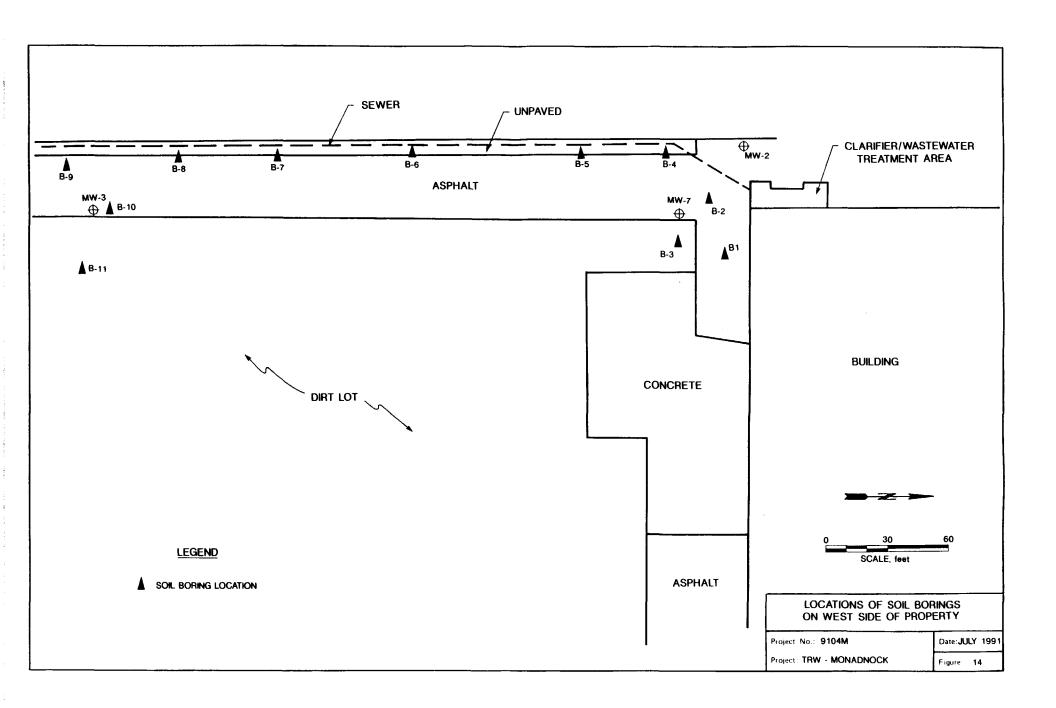
As an illustration, seven soil borings (Borings B-13 through B-17, B-19, and B-21) were located in the degreaser area within the manufacturing building. Borings B-13 and B-14 were located within the area exhibiting the highest VOC concentrations (tens of thousands of parts per billion). The five remaining borings, sited to evaluate the lateral extent of VOC contamination in the subsurface soils, were placed in areas containing thousands of parts per billion of VOCs in the soil gas.

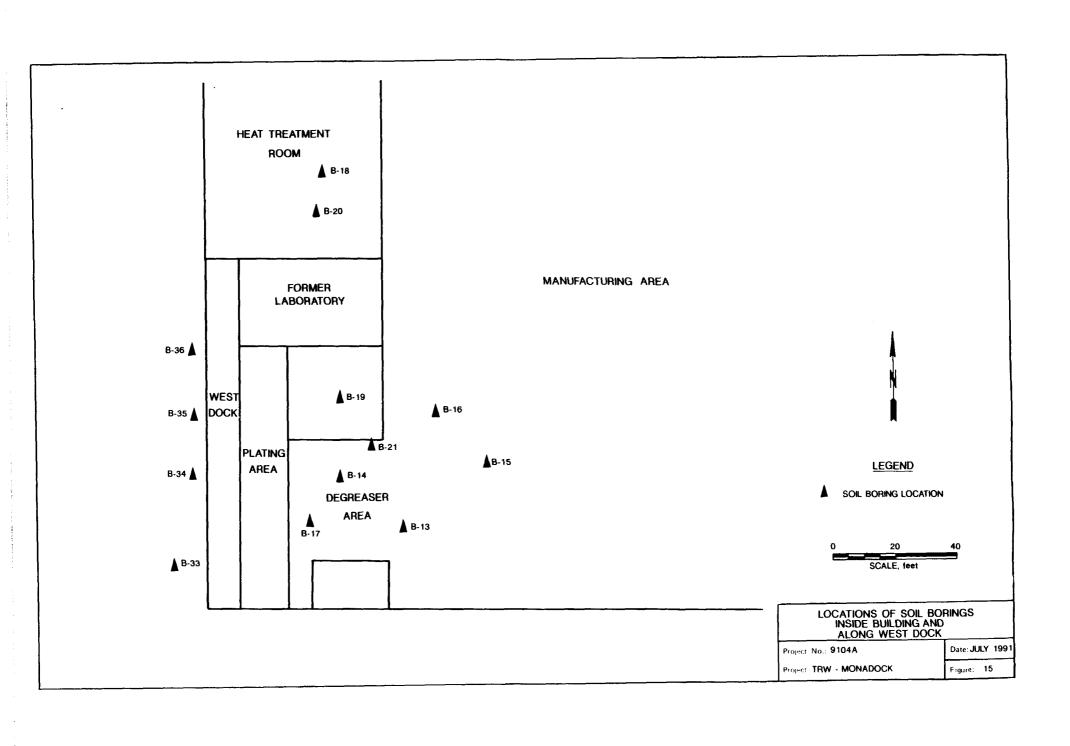
3.2 Locations of Soil Borings to Evaluate Potential Cyanide, Cadmium, and Chromium Contamination

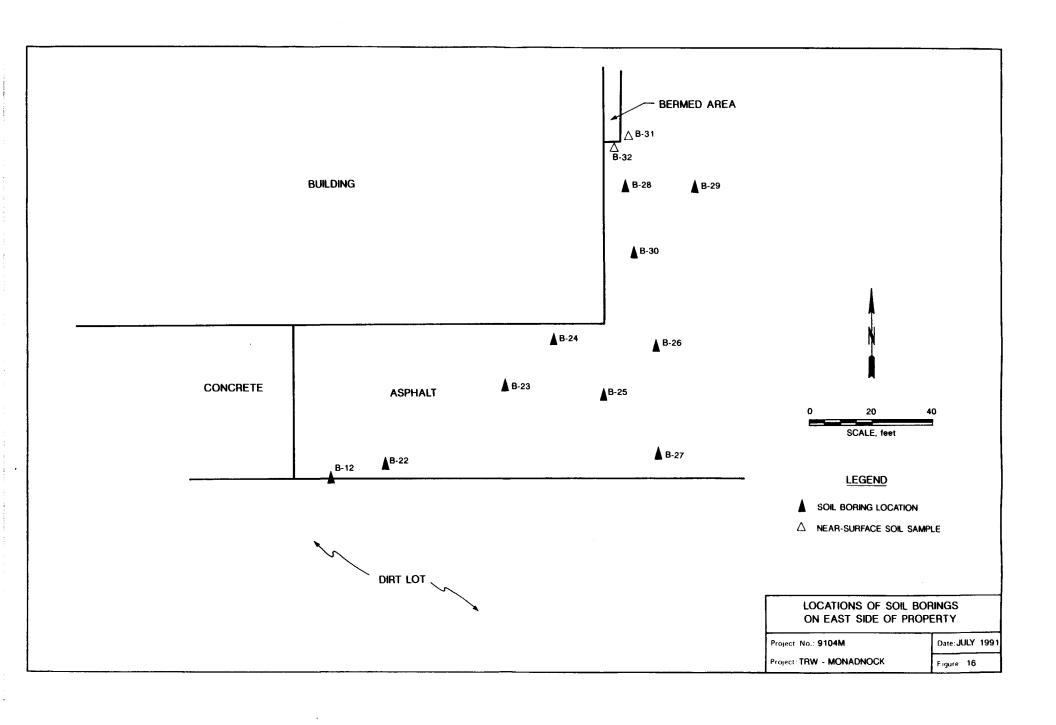
The areas in which cyanide, chromium, and cadmium contamination were identified during the Phase 2A investigation were also further evaluated during the soil sampling and analysis program. Six soil borings (Borings B-18, B-20, and B-33 through B-36) were drilled in the heat treatment room and along the west dock area. Borings B-18 and B-20 were located to evaluate both potential cyanide and VOC contamination in the heat treatment room. Borings B-33 through B-36 were sited to assess potential cyanide contamination along the west dock area. In addition, Borings B-33 and B-34 were used to evaluate potential cadmium and chromium contamination adjacent to the clarifier and west dock storage area, respectively. The locations of the soil borings are shown on Figures 14 through 16.

3.3 Locations of Soil Borings to Evaluate Potential Contamination Adjacent to Bermed Area on East Side of Building

Because of continuing concerns of the RWQCB about potential contamination adjacent to the bermed area on the east side of the building, two shallow soil borings (Borings B-31 and B-32) were drilled in this area. Near-surface soil samples were collected from each boring to assess VOC and petroleum-related compound contamination near the bermed area. If VOCs or







petroleum-related compounds are detected in the soil samples, a more extensive soil sampling and analysis program would be conducted in and around the bermed area during a future phase of investigation.

3.4 Drilling and Soil Sampling

Borings B-31 and B-32, located next to the bermed area on the east side of the building, were drilled to an approximate depth of 0.5 feet. One soil sample was collected from the bottom of each boring.

The remainder of the borings were drilled to approximately 25 feet below grade. Borings were not extended beyond this depth to avoid contact with the underlying ground water, present at about 30 feet below the ground surface. To evaluate the vertical extent of contaminants in the subsurface soils, soil samples were collected at 5-foot intervals within each boring.

Drilling and soil sampling protocols are summarized in Appendix B. Copies of the boring logs are presented in Appendix C.

The drill cuttings and decontamination wastewater were placed in 55-gallon drums and stored onsite. The drums containing the drill cuttings were labeled as to boring location and depth. The drums containing the decontamination wastewater were labeled as such. The soil cuttings and wastewater will be disposed of either onsite or at an appropriate waste disposal facility.

3.5 Chemical Analyses of Soil Samples

Soil samples were delivered under chain-of-custody documentation to CKY Analytical Laboratories, a California-certified hazardous waste analytical laboratory. The samples were analyzed as follows:

ORGANIC COMPOUND ANALYSES

- o Soil samples collected along the sewer, near Monitoring Well MW-3, inside the building, and along the pavement/dirt interface south of the building (Borings B-1 through B-22) were analyzed for purgeable halogenated volatile organics using EPA Method 8010.
- o Soil samples collected from the area near the southeast corner of the building (Borings B-23 through B-30) were analyzed for VOCs using EPA Method 8260.
- o Soil samples collected immediately adjacent to the bermed area along the east wall of the building (Borings B-31 and B-32) were analyzed for VOCs using EPA Method 8260 and total petroleum hydrocarbons using EPA Method 418.1.

INORGANIC COMPOUND ANALYSES

- o Soil samples collected along the west dock area and the heat treatment room (Borings B-18, B-20, and B-33 through B-36) were analyzed for cyanide using EPA Method 335.2.
- o Soil samples collected adjacent to the clarifier (Boring B-33) were analyzed for cadmium using EPA Methods 3050/6010.
- o Soil samples collected from Boring B-34 were analyzed for chromium using EPA Methods 3050/6010.

Results of the chemical analyses of the soil samples are presented in Table 1 and are shown on Figures 17 through 21. Copies of the chain-of-custody forms and the analytical laboratory reports are included in Appendix D.

3.6 Quality Assurance/Quality Control Samples

The following quality assurance/quality control (QA/QC) samples were incorporated into the soil sample analysis program:

- o surrogate recovery samples
- o matrix spike and spike duplicate samples

Results of the analysis of the QA/QC samples were within specifications established by CKY Analytical Laboratories. These specifications were developed in conformance with U.S. Environmental Protection Agency and California Environmental Protection Agency guidelines.

4.0 DISCUSSION OF RESULTS AND CONCLUSIONS

Based on the historical uses of the site, the locations of potential pathways (underground structures, piping, drains) for contaminants to impact subsurface soils, and the analytical data generated during the Phase 2A and Phase 2B investigations, IDEA concludes that chemical contaminants have impacted subsurface soils at the Monadnock Company site. The degree of impact varies as to chemical constituent and location at the site.

TABLE 1

RESULTS OF CHEMICAL ANALYSES OF SOIL SAMPLES

SAMPLE IDENTIFICATION	SAMPLE DEPTH (feet)	CT (μg/kg)	DCE (μg/kg)	PCE (μg/kg)	TCA (μg/kg)	TCE (μg/kg)	CYN (mg/kg)	CAD (mg/kg)	CHR (mg/kg)	TPH (mg/kg)
BORING B-1	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	9	ND(5)	ND(5)	1			1
	15	ND(5)	ND(5)	7	ND(5)	ND(5)				
	20	ND(5)	ND(5)	12	ND(5)	ND(5)				
<u> </u>	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
BORING B-2	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	6	ND(5)	ND(5)				ļ
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				l
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
BORING B-3	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
20	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)			<u></u>	
BORING B-4	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)			[ţ
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		·	_	
BORING B-5	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				Í
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				1
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)			1	1
	25	ND(5)	ND(5)	7	ND(5)	8				
BORING B-6	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				1
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	i		1	1
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)]	1
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				

TABLE 1 CONTINUED

SAMPLE IDENTIFICATION	SAMPLE DEPTH (feet)	CT (μg/kg)	DCE (µg/kg)	PCE (μg/kg)	TCA (μg/kg)	TCE (μg/kg)	CYN (mg/kg)	CAD (mg/kg)	CHR (mg/kg)	TPH (mg/kg)
BORING B-7	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)			ļ	
	20 25	ND(5) ND(5)	ND(5) ND(5)	ND(5) ND(5)	ND(5) ND(5)	ND(5) ND(5)				
BORING B-8	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
DOKING D C	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
BORING B-9	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		İ		
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)]
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				i
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		ļ		
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		-		<u> </u>
BORING B-10	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		ĺ		
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				1
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)			<u> </u>	
BORING B-11	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	i			
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	i			
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		 	ļ	<u> </u>
BORING B-12	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	•	•		
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	20 25	ND(5)	ND(5)	11 ND(5)	ND(5)	ND(5)				
	+ 45	ND(5)	ND(5)	#U(2)	ND(5)	ND(5)	<u> </u>	-		
BORING B-13	5	ND (5)	ND(5)	220	ND(5)	88				
	10	ND(5)	ND(5)	27	ND(5)	ND(5)				l
	15	ND(5)	ND(5)	6	ND(5)	ND(5)	1		1	
	20	12	ND(5)	43	ND(5)	19	İ			
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	<u></u>	<u> </u>		

TABLE 1 CONTINUED

SAMPLE IDENTIFICATION	SAMPLE DEPTH (feet)	CT (µg/kg)	DCE (μg/kg)	PCE (μg/kg)	TCA (μg/kg)	TCE (μg/kg)	CYN (mg/kg)	CAD (mg/kg)	CHR (mg/kg)	TPH (mg/kg)
BORING B-14	5	ND(5)	120	780	ND(5)	170				
	10	ND(5)	16	78	ND(5)	21				ŀ
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		:		
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		1]
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)			ļ <u></u>	
BORING B-15	5	ND(5)	ND(5)	14	ND(5)	ND(5)	i			
	10	ND(5)	ND(5)	15	ND(5)	7				
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				İ
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				ľ
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				<u> </u>
BORING B-16	5	ND(5)	ND(5)	130	ND(5)	ND(5)	ţ	ļ	1	
BOKING B 10	10	ND(5)	ND(5)	61	ND(5)	45				ĺ
	15	ND(5)	ND(5)	10	ND(5)	5				l
	20	ND(5)	ND(5)	9	ND(5)	ND(5)				
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
BORING B-17	5	ND(5)	ND(5)	1100	ND(5)	230				
BORING B 11	10	ND(5)	ND(5)	39	ND(5)	15				
	15	ND(5)	ND(5)	6	ND(5)	ND(5)				
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	1		1	İ
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)			ļ	İ
BORING B-18	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(2)			
DOKING B-10	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(2)			ļ
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(2)	f		İ
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(2)			
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(2)			
BORING B-19	5	ND(5)	110	ND(5)	1D(5)	11				
BUKING B-19	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				1
	15	ND(5)	ND(5)	12	ND(5)	7]		
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
popting p 30	E	NO (E)	ND (E)	ND (E)	ND/E)	ND/E)	ND (3)			
BORING B-20	5	ND(5)	ND(5) ND(5)	ND(5) ND(5)	ND(5) ND(5)	ND(5) ND(5)	ND(2) ND(2)			
	10 15	ND(5) ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(2)	l		į .
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(2)			i
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ND(2)			

TABLE 1 CONTINUED

SAMPLE IDENTIFICATION	SAMPLE DEPTH (feet)	CT (μg/kg)	DCE (μg/kg)	PCE (μg/kg)	TCA (μg/kg)	TCE (μg/kg)	CYN (mg/kg)	CAD (mg/kg)	CHR (mg/kg)	TPH (mg/kg)
BORING B-21	5	ND(5)	92	ND(5)	ND(5)	ND(5)				
	10 15	ND(5) ND(5)	ND(5) ND(5)	29 10	ND(5) ND(5)	14 ND(5)				
	20	ND(5)	ND(5)	15	ND(5)	ND(5)				ļ
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
BORING B-22	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		ŧ		
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)]			1
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)			1	1
<u>-</u>	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ļ			ļ
BORING B-23	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	ł			
	15	ND(5)	ND(5)	14	ND(5)	11				
	20 25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
BORING B-24	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	1			
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	20 25	ND(5) ND(5)	ND(5) ND(5)	ND(5) ND(5)	ND(5) ND(5)	ND(5) ND(5)			1	
	25	NU(3)	(C)UN	NU(3)	NU(J)	ND(3)	 			
BORING B-25	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	20 25	ND(5) ND(5)	ND(5) ND(5)	16	ND(5) ND(5)	10 ND(5)			1	
	 ''	ND(5)	MU(5)	ND(5)	MD(2)	(כ) או			<u> </u>	
BORING B-26	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)]	
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	20 25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	 	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
BORING B-27	5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)		1		
	10	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				1
	15	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	İ			
	20	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				
	25	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)	1	<u> 1</u>	1	1

TABLE 1 CONTINUED

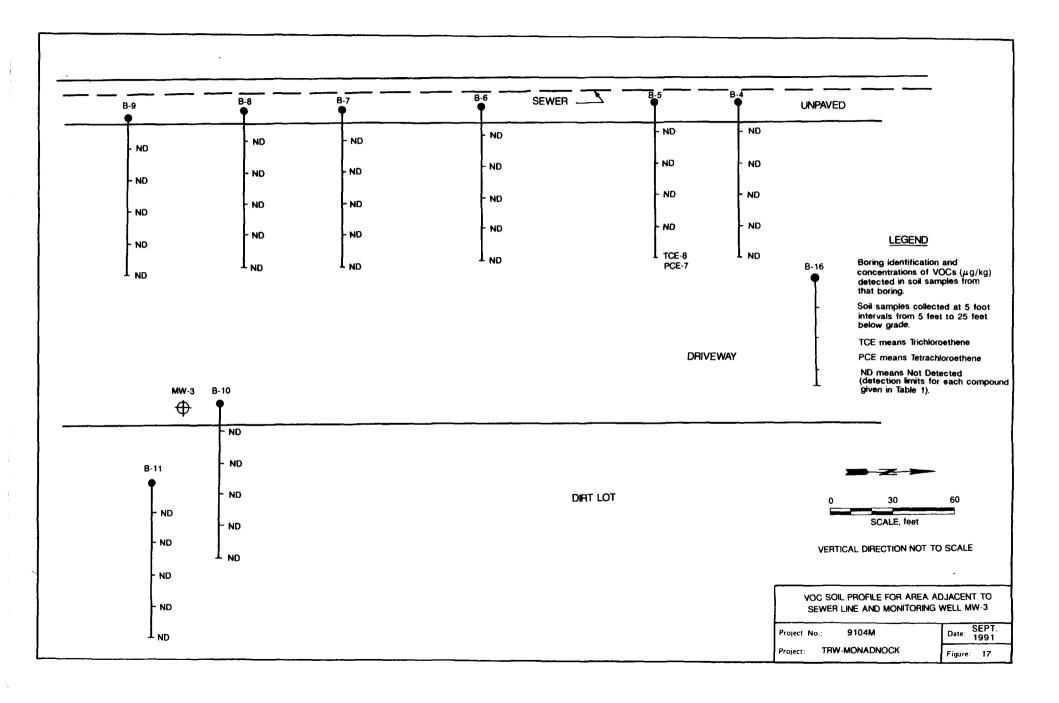
SAMPLE IDENTIFICATION	SAMPLE DEPTH (feet)	CT (μg/kg)	DCE (μg/kg)	PCE (μg/kg)	TCA (μg/kg)	TCE (μg/kg)	CYN. (mg/kg)	CAD (mg/kg)	CHR (mg/kg)	TPH (mg/kg)
BORING B-28	5 10 15 20 25	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)				
BORING B-29	5 10 15 20 25	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5) ND(5)				
BORING B-30	5 10 15 20 25	ND(5) ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) 6.1 ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5)	ND(5) ND(5) ND(5) ND(5) ND(5) ND(5)				
BORING B-31	0.5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				33
BORING B-32	0.5	ND(5)	ND(5)	ND(5)	ND(5)	ND(5)				76
BORING B-33	5 10 15 20 25						ND(2) ND(2) ND(2) ND(2) ND(2)	5.0 5.0 5.0 2.0 2.0		
BORING B-34	5 10 15 20 25						ND(2) ND(2) ND(2) ND(2) ND(2)		30 26 30 8.0 6.0	
BORING B-35	5 10 15 20 25						ND(2) ND(2) ND(2) ND(2) ND(2)			

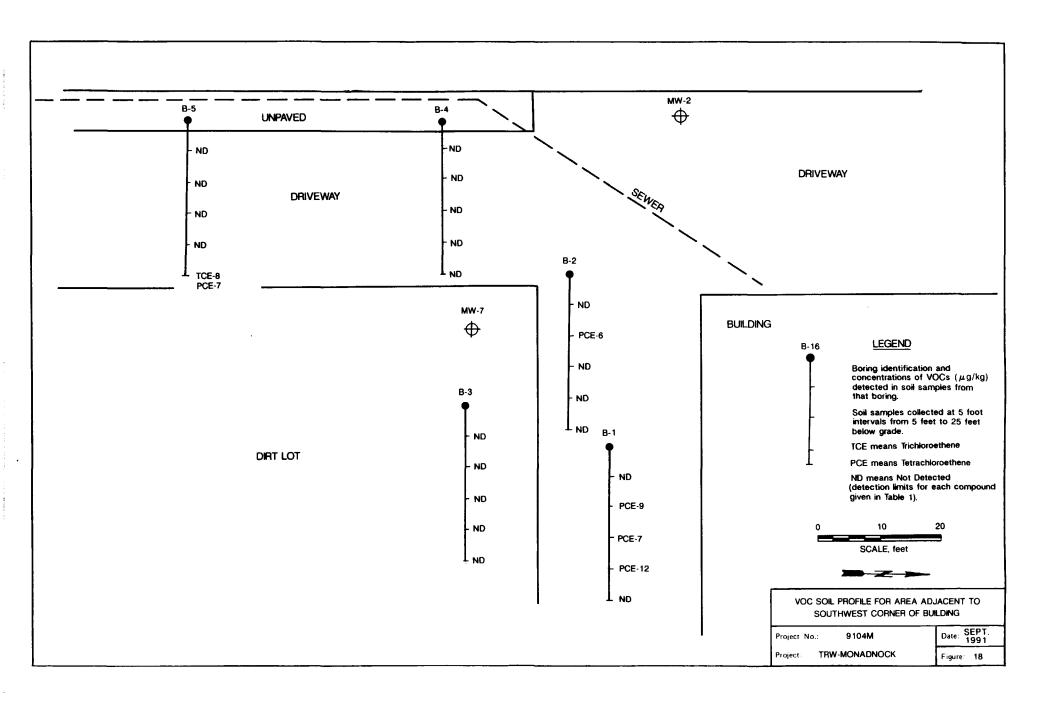
TABLE 1 CONTINUED

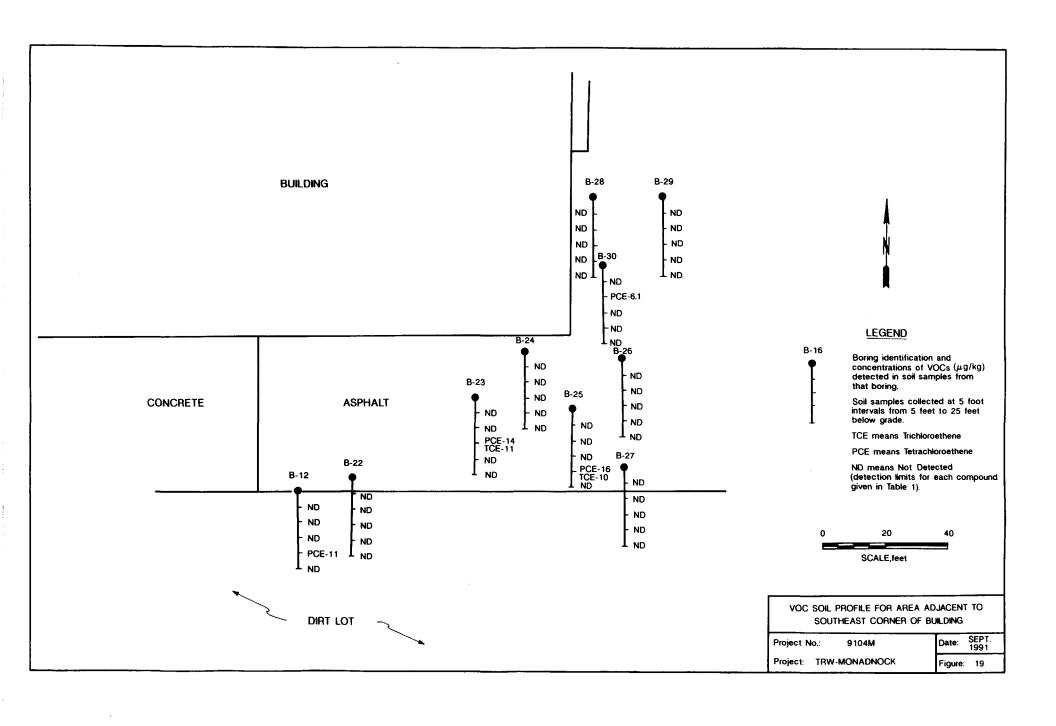
SAMPLE IDENTIFICATION	SAMPLE DEPTH (feet)	CT (µg/kg)	DCE (μg/kg)	PCE (μg/kg)	TCA (μg/kg)	TCE (μg/kg)	CYN (mg/kg)	CAD (mg/kg)	CHR (mg/kg)	TPH (mg/kg)
BORING B-36	5 10 15 20 25						ND(2) ND(2) ND(2) ND(2) ND(2)			

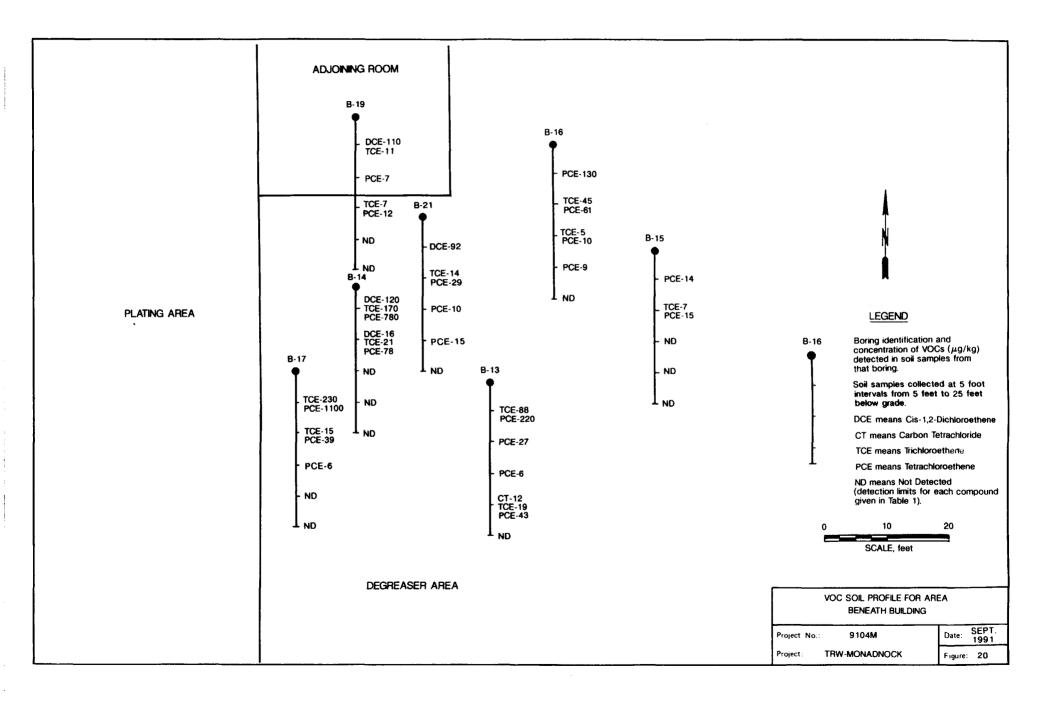
NOTES:

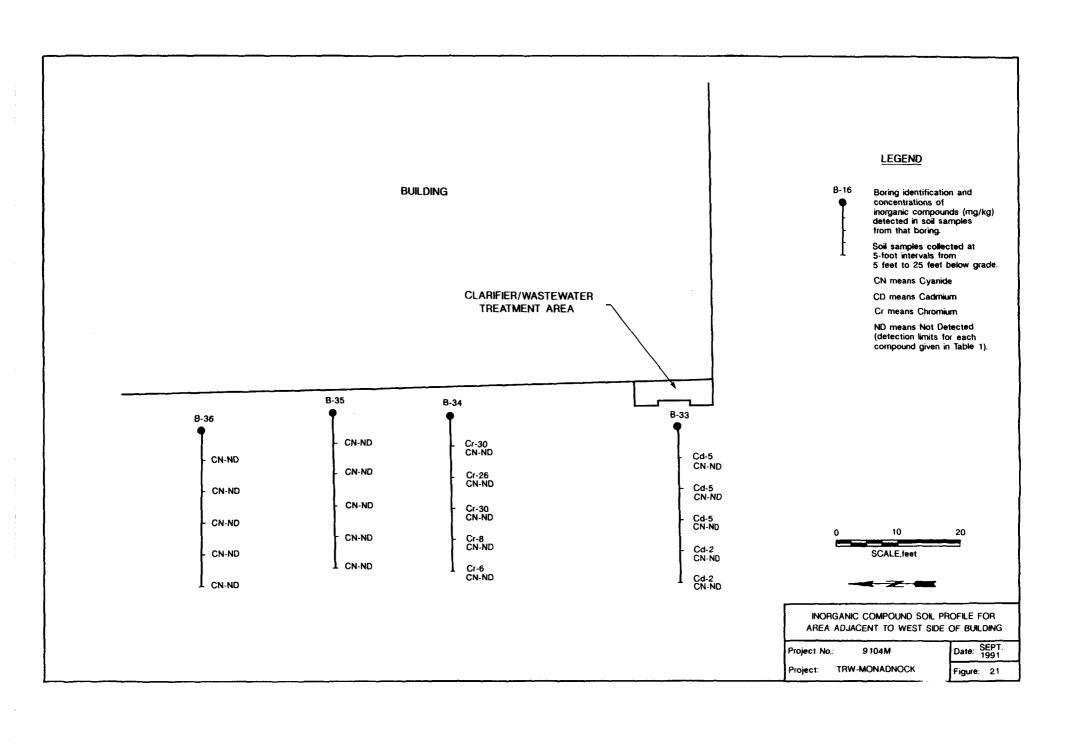
- (1) CT means carbon tetrachloride.
 - DCE means cis-1,2-dichloroethene.
 - PCE means tetrachloroethene.
 - TCA means 1,1,1-trichloroethane.
 - TCE means trichloroethene.
 - CYN means cyanide.
 - CAD means cadmium.
 - CHR means chromium.
 - TPH means total petroleum hydrocarbons.
- (2) ND() means not detected at the concentration shown in parentheses.
- (3) Blank entries indicate that specific analysis was not conducted.
- Only those compounds or elements specifically detected are listed in Table 1. Compounds whose concentrations were below the detection limits in the respective analytical laboratory reports included in Appendix D.











4.1 VOC Contamination

Subsurface soils have been impacted by VOCs. Areas impacted by VOCs include the following:

Sewer line and area adjacent to Monitoring Well MW-3 - Traces of PCE and TCE (7 μ g/kg and 8 μ g/kg, respectively) were detected in Boring B-5, located adjacent to the sewer line (see Figure 17). The compounds were present in a soil sample collected at approximately 25 feet below grade.

The extent of PCE and TCE in the subsurface soils around Boring B-5 does not appear to be extensive. These compounds were not detected in soil samples collected from other depths within Boring B-5, nor were they detected in soil samples from Borings B-4 and B-6 (located approximately 40 and 80 feet, respectively from Boring B-5).

PCE and TCE were detected in subsurface soils within about five feet of underlying ground water. Thus, a significant possibility exists that these compounds may have impacted ground water in the area of Boring B-5.

VOCs were not detected in soil samples collected from other areas along the sewer line or adjacent to Monitoring Well MW-3. Thus, it does not appear that these areas have been impacted by VOCs.

- o Southwest corner of building and alleged former swamp area VOCs were not detected in soil samples collected from borings drilled near the southwest corner of the building or the alleged former swamp area (see Figure 18). Thus, it does not appear that these areas have been impacted by VOCs.
- Southeast corner of building and bermed area along east wall of building PCE and TCE were detected in soil samples collected from Borings B-23, B-25, and B-30, drilled near the southeast corner of the building (see Figure 19). The concentrations of these compounds ranged from $6.1 \, \mu g/kg$ to $16 \, \mu g/kg$.

The compounds are present in an area approximately 25 feet south of the southeast corner of the building. Their lateral extent appears to be somewhat confined, in that PCE and TCE were not detected in soil samples collected from borings 20 feet north (Boring B-24) or 15 feet east (Borings B-26 and B-27) of the impacted area.

The highest concentrations of these compounds were detected in soil samples collected from about 15 to 20 feet below grade. Thus, the possibility exists that these compounds may have impacted ground water in the area adjacent to the southeast corner of the building.

Degreaser area inside building - Cis-1,2-dichloroethene (DCE), PCE, and TCE were detected in soil samples collected from several borings drilled in the degreaser area (see Figure 20). DCE and TCE were detected at concentrations of up to hundreds of parts per billion; PCE was detected at concentrations of up to 1,100 parts per billion. The compounds were detected in soil samples collected from about 5 feet below the floor of the building (same level as ground surface) to 20 feet below the floor of the building (15 feet below the ground surface), with concentrations generally decreasing with depth. VOCs were not detected in soil samples collected from 25 feet below the building floor in any of the seven borings drilled in the degreaser area. Thus, it appears that VOC contaminants found in the subsurface soils beneath the degreaser area may be confined to depths of 15 feet or less. Consequently, these contaminants do not appear to have impacted ground water beneath the degreaser area.

Laterally, the compounds are present in subsurface soils throughout the degreaser area. Additionally, they extend into the manufacturing area to the east and the adjoining room to the north.

- Pavement line south of building PCE at a concentration of $11 \mu g/kg$ was detected in a soil sample from Boring B-12, located along the asphalt/dirt interface south of the building. The soil sample had been collected at an approximate depth of 20 feet below grade. VOCs were not detected in soil samples collected from Boring B-22, located about 15 feet east of Boring B-12.
- o Bermed area along east wall of building VOCs were not detected in soil samples collected from Borings B-31 and B-32, located at the southeast edge of the bermed area.

Based on the results of the Phase 2B investigation, soil gas migration does appear to be occurring at the site. Analysis of soil gas data collected during the Phase 2B investigation indicates that decreasing concentrations of PCE, TCE, and TCA exist in soil gas, moving from the degreaser area toward the heat treatment room. In addition, though soil gas adjacent to the sump in the heat treatment room contained PCE, TCE, and TCA, these compounds were not detected in soil samples collected from the area (Borings B-18 and B-20).

Similarly, analysis of soil gas data collected during the Phase 2B investigation indicates that decreasing concentrations of PCE, TCE, and TCA exist, moving from the alleged former swamp area and the sewer line toward the clarifier. Additionally, soil samples collected from Boring B-2, located between the alleged former swamp area and the clarifier, did not contain detectable concentrations of PCE, TCE, and TCA.

4.2 Cyanide, Cadmium, and Chromium Contamination

Cyanide, cadmium, and chromium had been detected in near-surface soil samples collected during the Phase 2A investigation. These samples had been collected adjacent to the clarifier, along the west dock area, and in the heat treatment room.

It appears that the vertical extent of these compounds in subsurface soils is limited to the near-surface. Soil samples collected from borings drilled during the Phase 2B investigation (Borings B-18, B-20, and B-33 through B-36) did not contain detectable concentrations of cyanide. Soil samples collected from Boring B-33 contained cadmium at concentrations ranging from 2.0 to 5.0 milligrams of contaminant per kilogram of soil (mg/kg). Soil samples collected from Boring B-34 contained chromium at concentrations ranging from 6.0 to 30 mg/kg. These concentrations of cadmium and chromium are considered typical background levels for soils.

4.3 Petroleum-Related Compound Contamination Adjacent to Bermed Area Along East Wall of Building

Petroleum-related compounds were not detected in soil samples collected from Borings B-31 and B-32, located at the southeast edge of the bermed area.

5.0 RECOMMENDATIONS

Soil remediation to reduce concentrations of VOCs in subsurface soils may be required at the Monadnock Company site. To establish whether soil remediation may be required or not, it is necessary to assess whether underlying ground water has been impacted by VOCs migrating through the soil.

Potential impacts to ground water from VOCs are indicated by the analytical data generated during the Phase 2B investigation. Specifically, ground water may have been impacted in the following areas of the Monadnock Company site:

- o northern portion of sewer line
- o southeast corner of building

To evaluate if ground water has been impacted in these areas, IDEA recommends that a ground water investigation program, consisting of (1) the installation of ground water observation wells and (2) ground water sampling and analysis using the existing and proposed wells. Prior to initiation of the ground water investigation program, a work plan will be submitted to the RWQCB outlining the locations and rationale for any proposed wells, well installation procedures, and ground water sampling and analysis protocols.

If ground water has been impacted by VOCs within a certain area, soil cleanup levels will need to be negotiated with the RWQCB. If, based on the results of the ground water investigation program, ground water impacts are not indicated for an area, no soil remediation should be required.

APPENDIX A SOIL GAS SURVEY PROTOCOLS

APPENDIX A

PROTOCOLS FOR SOIL GAS SURVEY

SOIL GAS SURVEY

A soil gas survey was conducted to investigate the potential presence of selected volatile organic compounds (VOCs) in the shallow subsurface. Information collected during the soil gas survey was used in the selection of locations for soil borings and may be used in the selection of locations for future soil borings and/or groundwater monitoring wells.

Field Procedures

Sixty-six soil probes, consisting of 1/2-inch-diameter, partially perforated galvanized pipe, were installed during the Phase 2B investigation. The probes were installed by coring small holes, where appropriate, through the asphalt or concrete and driving them to depths of approximately 4 to 8 feet with the aid of a pneumatic fence post driver. Soil gas samples were collected from individual probes using an oil-less vacuum system. Samples were withdrawn with a glass-barreled syringe through a membrane (septum) in the gas sampling line and were injected directly into a GC for analysis.

Soil gas samples were analyzed using a field operable gas chromatograph equipped with both a flame ionization detector (FID) and an electron capture detector (ECD). The binary detector approach allowed each of the compounds included under EPA Methods 601 and 602 to be detected and tentatively identified. Results were then semi-quantified based on response factors from compounds used in the calibration standard. In general, the FID is the preferred detector for non-halogenated organic compounds, while the ECD is generally more sensitive to the halogenated species. Accordingly, the FID allowed detection limits down to concentrations of approximately 100 ppb for the following specifically-identified compounds: benzene, toluene, and xylene (BTX). The ECD allowed detection limits of approximately 5 ppb for TCA, TCE, and PCE. Samples were generally collected three minutes after applying the vacuum system to the probe, and were analyzed simultaneously on both detectors.

Soil Gas Survey Limitations

Under some circumstances, it is not possible to separate and identify certain mixtures of compounds with gas chromatography. This is generally not a problem, as the main objective of soil gas surveying is to identify areas of relatively higher or lower VOC concentrations. However, some uncertainty does exist and it is possible that a tentatively identified compound may be misinterpreted as another compound similar in nature. This problem is most common with the highly volatile (light) organic compounds, such as methylene chloride, which is chromatographically similar to 1,1-dichloroethene (1,1-DCE); 1,1-dichloroethane (1,1-DCA); trans-1,2-dichloroethylene (trans-1,2-DCE); cis-1,2-dichloroethylene (cis-1,2-DCE); and Freon (several isomers), among others.

Comparisons of the results from soil gas sampling are based on the assumption that the subsurface materials are relatively homogenous and permeable. It is recognized, however, that cut and fill work associated with foundation preparation may produce pockets of either higher or lower permeabilities in the shallow subsurface.

Quality Assurance/Quality Control

Ambient air and/or nitrogen gas blanks were run prior to sampling each probe. Calibration curves were derived using standards of at least three different concentrations (accomplished by varying volume). Approximately five to ten percent of all sample injections were duplicated, and only readings within 50 percent of each other were considered satisfactory (the higher reading is reported). Since concentrations varied over several orders of magnitude, this level of reproducibility was considered acceptable.

SOIL GAS PROBE AND CONSTRUCTION INSTALLATION PROCEDURES

The probes were cleaned with hot, soapy, pressurized water and thoroughly rinsed before arrival at the site. At the site, probes from each lot were connected to the sampling system and checked for contamination using the GC. None of sampled probes showed concentrations of detectable compounds.

The probes consisted of 1/2-inch-diameter galvanized pipe, perforated near the tip. A galvanized sampling head was attached with Teflon-taped threads. Probes were installed to the required depth using a fence post driver.

SOIL GAS SAMPLING PROCEDURES

The sampling system consisted of an oil-less vacuum pump connected up-flow from the vacuum gage, the flow meter, the flow control valve, and the sampling bulb. Sampling was accomplished by extracting samples through a septum on the pipe head.

The perforated area of the probe is usually sufficient to allow the unimpeded collection of samples at the applied flow rates. Since the integrated area of the openings is approximately 1 inch square, it would not appear to be significantly less in area than that of other probe designs, including those which utilize partial withdrawal of the sampling tip.

After probe installation, the soil gas sampling system was connected, the pump turned on, and all joints checked for possible leakage. In addition, the joints of the sampling system were checked for leakage at the beginning and end of each sampling day. The flow rate was adjusted to approximately one liter per minute, and the vacuum gage reading was noted for indications of relatively high vacuum conditions which may result from placement into an impermeable clay or saturated zone. After removing at least two probe volumes of air, sampling was begun.

After performing background and residual contamination checks, 0.1 ml soil gas samples were collected with a glass-barreled syringe through the septum on the sampling line and analyzed on site by injection directly into the GC. The effects of partial adsorption onto the walls of the glass barreled syringe are unknown. However, from previous experience, neither Woodward-Clyde (Tom Zdeb) nor West Coast Analytical Services (Craig Hechanora, Gas Chromatography Section Head) has ever noted an observable adsorption effect during routine injections with such syringes using a wide variety of gases in diverse matrixes. Since repeatability for routine GC injection is at best ± 5 percent, these effects could be quantified as probability less than ± 5 percent.

ANALYTICAL SYSTEM

The sample is injected with a syringe through a membrane (a septum) into the GC. Thereafter the gas is separated into its various components as it proceeds down a tubular column which separates the mixture by allowing high boiling point (low volatility) compounds to elute later because they travel down the column at a slower rate. As these peaks elute off the column, they are sensed by a detector which electronically records the compound as a peak. The size of the peak corresponds to the amount of the compound. Peak areas were integrated using electronic integrators.

Gas Chromatograph Column Development: Several combinations of chromatographic column material, column lengths, and column temperatures were tested to optimize separation of the sample gas within reasonable time limits. After some testing, the analytical column chosen for use in these studies was a 2.6-meter-long SP 1000 column filled with Supelcoport 100-120 mesh (Supelco, Inc.). Optimal column temperature was 110°C.

Detector Sensitivity/Detection Limits: Sensitivity of the detectors for the compounds of interest in this study (TCA, TCE, PCE, and BTX) allowed distinguishable, separate peaks at concentrations greater than 5 ppb (gas phase volume/volume) for the ECD and greater than 100 ppb for the FID.

Calculation of Detection Limits

Detection limits were empirically determined using a nondiluted certified gas-phase standard consisting of 10 ppm (volume/volume) each of TCE, TCA, PCE, and BTX. This standard was injected into the GC in amounts that varied between 1 microliter (µl) to 1 ml.

The purpose was to monitor the response of the GC to the injection of a known amount (volume times concentration) of a given compound.

The response of the GC to various amounts of a given compound allowed a graph to be constructed which correlates the response of the GC to the amount of the compound. (Note that the amount of the compound injected in this example was varied by adjusting the volume, not the concentration). The scales of the graph are logarithmic to allow a range of both the GC response units and the injected volumes to be plotted.

After the graph was constructed, the GC response units of an unknown amount of a given compound (identified chromatographically) were compared to the "curve" to allow the amount of the unknown to be quantified. For example, if 1,000 GC response units were recorded from a 100 ml injection of an unknown, then according to the graph this would correspond to 0.01 ml of the standard. This 100 ml injection of the unknown (the amount routinely injected during the soil gas survey) was correlated to 0.01 ml of the 10 ppm standard, and the concentration of unknown was calculated as follows:

From the volume/concentration relationship

$$(V_1)(C_1) = (V_2)(C_2)$$

where:

 V_1 = Volume of Standard

 C_1 = Concentration of Standard

 V_2 = Volume of Unknown

 C_2 = Concentration of Unknown

Therefore:

 $(0.01 \text{ ml})(10 \text{ ppm}) = (100 \text{ ml})(C_2)$

 $C_2 = 1 \text{ ppm (volume/volume)}.$

By comparison with the known standard, the unknown concentration equals 1 ppm.

Continuing with this reasoning, a 100 ml injection of an unknown which resulted in 10 GC response units would be equivalent to 0.01 ppm. This amount would be the lower detection limit (0.08 ppm) declared based on a 100 ml routine injection volume for the unknown. No extrapolation of the standard curve beyond the lowest point empirically determined was required to achieve this limit. In practice at least one standard is usually prepared from a dilution of the primary standard to allow the lower end of the calibration curve to be extended without using any extrapolation.

APPENDIX B DRILLING AND SOIL SAMPLING PROTOCOLS

APPENDIX B

DRILLING AND SOIL SAMPLING PROTOCOLS

HAND-AUGERED BORINGS

Soil sampling consisted of hand-augering a hole to a depth of approximately 0.5 feet at each sampling location. Soil samples were collected using a modified split spoon sampler containing three brass tubes. The sampler was placed in the hand-augered hole and driven to the desired depth using a hammer.

After sample collection, the brass tubes were extruded from the sampler. The contents of one tube was extruded into a glass jar, and a headspace organic vapor analyzer (OVA) reading was taken and recorded on the boring log. A second brass tube was sealed with aluminum foil and PVC end caps for shipment to the analytical laboratory. To identify each tube, sample labels were used; each label contained the project name, sample identification, sample number, date, and sampler's signature.

The sample tubes were stored in a portable ice chest and cooled with ice. Samples were delivered to CKY Analytical Laboratories within 24 hours of collection. Chain-of-custody procedures, including the use of sample identification labels and chain-of-custody forms, were used for tracking the collection and shipment of the samples.

Sample equipment was cleaned between sample locations using the following general procedures:

- o Water rinse, brush assisted if necessary, to remove dirt and mud
- o Water wash with detergent (TSP)
- o Rinse with deionized water to remove detergent
- o Dry with a towel

DEEPER BORINGS

Borings were drilled with a 6-inch diameter, hollow-stem, continuous-flight auger. Soil samples were collected for stratigraphic information, laboratory analyses, and headspace analysis for VOCs. Sampling was performed using a 2-inch diameter modified split spoon sampler containing three brass tubes. At each sampling depth, the sampler was driven into the undisturbed soil below the lead auger by dropping a 140-pound hammer approximately 30 inches.

The brass tubes from each sampling interval were extruded from the sampler. The contents of one tube was extruded into a glass jar, and a headspace organic vapor analyzer (OVA) reading was taken and recorded on the boring log. A second brass tube was sealed with aluminum foil and PVC end caps for shipment to the analytical laboratory. To identify each tube, sample labels were used; each label contained the project name, sample identification, sample number, date, and sampler's signature.

The sample tubes were stored in a portable ice chest and cooled with ice. Samples were delivered to CKY Analytical Laboratories within 24 hours of collection. Chain-of-custody procedures, including the use of samplke identification labels and chain-of-custody forms, were used for tracking the collection and shipment of the samples.

Sample equipment was cleaned between sample locations using the following general procedures:

- o Water rinse, brush assisted if necessary, to remove dirt and mud
- o Water wash with detergent (TSP)
- o Rinse with deionized water to remove detergent
- o Dry with a towel

Drill augers were steam-cleaned either at the driller's facility or at the Monadnock Company site.

APPENDIX C
BORING LOGS

DATE	DRILLED/COMPLETED: 7-15-91		TOP OF C	ASE	IG: S	ELFV	ATION	; N/		
	OGIST: J. REAMES		BORING D					T. BGS		
DRILL			WATER D					PENET)
SURF	NCE ELEVATION: NA		WELL SC	REE	N DI			NA		
DEPTH (feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG			AM • ŧ	Head- Space N.O.	(ppm)	illing te(Time)	REMARKS
		LITTH	₹89	Š.	Tyr	<u>සිරි</u>	Her	Gro	Z SS	
+	Asphalt — 3 inches thick. Dark brown, damp, medium stiff CLAY.	† † † + + + +		- - - - - - -						
5 + + + + + + + + + + + + + + + + + + +		CL	-		X	8	<1			No Odor
10		+++++++++++++++++++++++++++++++++++++++	-		X	7	<1			No Odor
+++++++++++++++++++++++++++++++++++++++	Dark, brown, moist, stiff, clayey SILT.	ML	-		X	15	<1			No Odor
+++++++++++++++++++++++++++++++++++++++	Grey, moist, medium dense, fine SAND.	SP	-		X	29	<1			No Odor
25+	Grey, moist, dense, coarse, sandy GRAVEL.	GW		-	X	35	<1			No Odor
30 + + + + + + + + + + + + + + + + + + +	BOTTOM OF BORING AT 26 FEET.	+ + + + + + + + + + + + + + + + + + + +								
	ject: MONADNOCK		IOC	_	\ T.	 דיי) (T	יואור	_ 1	Fig.
	ject No.: 031-02		LOG) ľ	- I	3U h	ING	RI	

DRILLER: B. NYDOSKE (CME 75)	WATER	WATER DEPTH : NO	NONE PENETRATED	ATED
ELEVATION: NA	WELL S	9	 NA	
DEPTH(feet) DESCRIPTION	LITHOLOGIC LOG WELL COMPLETION	LOG No. Type Blow Count	Blow Count Head-Space Reck-Ground Beck-Ground	Drilling Rate(Time) REMARKS
Asphalt — 3 inches thick. Dark brown, damp, medium stiff CLAY.		1		
CT 	ဝ	· · · · · · · · · · · · · · · · · · ·	7	No Odor
10 - Dark brown, damp, loose, clcyey SAND.	3		7	No Odor
15—Grey, damp, medium ctnse, fine to coarse SAND.		× × × × × × × × × × × × × × × × × × ×	Δ	No Odor
		——————————————————————————————————————	7	No Odor
25	GW	~ · · · · · · · · · · · · · · · · · ·	7	No Odor
BOTTOM OF BORING AT 26 FEET.				
30				
Project: MONADNOCK Project No: 031-02	LOG	OF	BORING	B2 Fig.

DATE	DRILLED/COMPLETED: 7-15-91	<u></u>	TOP OF C	ASIN	3 ELI	EVATIO	<u> </u>	NA	
	OGIST: J. REAMES		BORING D				T. BGS		
DRIL	ER: B. NYDOSKE (CME)		WATER D	EPTH	:	NONE	PENETI	RATED	
SURF	ACE ELEVATION: NA		WELL SC				NA		<u></u>
DEPTH(feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	;	SA	MPL o.v.	ES L (ppm	ηg Fime)	REMARKS
DEP		ГОС	WELL COMPI LOG	ON E	Blow	Count Head-	Back- Ground	Drilling Rate(Time)	MARKING
-	Asphalt — 3 inches thick. Dark brown, damp, stiff CLAY.	+		-					
5-	- - - - - - -	CL	-		12	2 <1			No Odor
10-	Dark brown, damp, medium stiff, clayey SILT.	H ML	-	2	ζ e	<1			No Odor
15	Grey, damp, medium dense, fine to coarse SAND	+ SW	-	Σ	42	2 <1			No Odor
20	Grey, moist, dense, coarse, sandy GRAVEL.	+	-	Σ	5 5	<1			No Odor
25	- - -	GW		-	34	1 <1			No Odor
	BOTTOM OF BORING AT 26 FEET.	+	-	-					
30	- · · · · · · · · · · · · · · · · · · ·	† + + + + + + + + + + + + + + + + + + +	+						
Pro	oject: MONADNOCK oject No.: 031-02		LOG	0	F	B0	RING	В	3 Fig.

Project: Project	35 30 30	25+	20	10	Cn	DEPTH(feet)	DATE DRILLE GEOLOGIST: DRILLER: SURFACE EL
et No.: 031-02	BOTTOM OF BORING AT 26 FEET.	Grey, moist, very dense, coarse sandy GRAVEL-	Grey, damp, medium dense, fine SAND.			DESCRIPTION	DRILLED/COMPLETED; 7-15-91 OCHST; J. REAMES ER; B. NYDOSKE (CME 75) ACE ELEVATION: NA
	- 		& 	+ + + + + +	+++++++++++++++++++++++++++++++++++++	LITHOLOGIC LOG	
LOG						WELL COMPLETION LOG	TOP OF CASING ELEVAT BORING DEPTH: : : : WATER DEPTH: NO WELL SCREEN DEPTH:
		<u> </u>	<u>м</u>	M	——————————————————————————————————————	No.	ASING EPTH PTH PEEN
T			\times \times \times \times \times \times \times \times \times \times	7	7	Type () Blow Count	
BORING			<u>^</u>	Δ	7	Head- Space A F	CASING ELEVATION: NA DEPTH: 26 FT. BGS DEPTH: NONE PENETRATED CREEN DEPTH: NA
ING						Beck- (pp K) Ground (P)	26 FT. BGS ONE PENETR
₩ 4						Drilling Rate(Time)	NATED
+		No Odor	No Odor	No Odor	No Odor	REMARKS	
Fig.						:KS	

Project: MONADNOCK Project No.: 031-02	BOTTOM OF BORING AT 26 FEET.	25 Brown, damp, medium dense, clayey SAND.	Grey, moist, dense, coarse, sandy GRAVEL.	15	10 Dark brown, damp, medium stiff, silty CLAY.	+Dark brown, damp, medium stiff SILT.	DESCRIPTION	ŀ	SUBFACE ELEVATION: NA	B NYDOCKE (CME	lä
	 	SC S	++++++ GW	& • 1 • 1 • 1 • 1	ρ	<u> </u>	LITHOLOGIC LOG		S 2	\$ Q	P 7
LOG	 	+ + +	* * * * * * 	., , , , , , , , , , , , , , , , , , , 	++++++		WELL COMPLETION LOG			WATER DEPTH .	TOP OF CA
OF		⋈	∑ 53	⊠ 22	M	⋈	No. Type Blow Count		T	` · ·	1 2/1
BORING		<u>^</u>	<u>^</u>	Δ	Δ	7	Head-O.V.A		1	NONE DE	ELEVATION :
ING							Beck- (pp C) Ground D		N E	PENETBATED	ו וי
B5		2	z		7		Drilling Rate(Time)		5		
- · · · -		No Odor	No Odor	No Odor	No Odor	No Odor	REMARKS				
म्।							KS				

DATE DRILLED/COMPLETED: 7-15-91		TOP OF C	ASB	KG I	FI FV	ATION	: N	Δ	
GEOLOGIST: J. REAMES		BORING D					T. BG		
DRILLER: B. NYDOSKE (CME 75)		WATER D						RATEL)
SURFACE ELEVATION: NA		WELL SC	REE	N D	EPTI	1:	NA		
DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG			AM	PLF o.v.a	CS (ppm	Drilling Rate(Time)	REMARKS
	LOG	WELL COMF LOG	No.	Type	Blow	Head- Space	Back- Ground	Drill Rate	
Brown, damp, stiff SILTY.	ML			X	9	<1	The American designation of the Control of the Cont	A section of the sect	No Odor
10—Becomes clayey SILT at 10 feet.	+ + + + + + + + + + + + + + + + + + +		-	X	13	<1			No Odor
15 Grey, moist, medium dense, silty SAND.	SM		-	X	26	<1			No Odor
20 Grey, moist, medium dense, coarse SAND with gravel.	sw		-	X	27	<1		The state of the s	No Odor
25 —	_	-	-	X	11	<1			No Odor
BOTTOM OF BORING AT 26 FEET.									
Project: MONADNOCK Project No.: 031-02		LOG	C) F	` I	30F	RINC	Б	6 Fig.

DATE	DRILLED/COMPLETED: 7-16-91		TOP OF C	ASIN	G F	ELEV	ATION		<u> </u>	
	OGIST: J. REAMES		BORING D				_	T. BGS		
DRILL	ER: B. NYDOSKE (CME 75)		WATER D	EPTH	1:	N			RATED)
SURF	ACE ELEVATION: NA		WELL SC	REEN	I DI	EPTH	1 :	NA		
DEPTH (feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG					Beck- () (S) Ground	Drilling Rate(Time)	REMARKS
Ω		LITTH	ESS ₹	Ŋ	Typ	Blow	Head- Space	Bac Gro	Dr Ra	
5	Dark brown, damp, medium stiff, silty CLAY.	CL		-	X	14	<1			No Odor
	Light brown, moist, medium dense, fine SAND.	SP		-	X	27	<1			No Odor
20	Grey, damp, dense, fine to coarse SAND.	sw		-		22	<1			No Odor
	Grey, moist, very dense, coarse sandy GRAVEL.	GW	-	-	X	49	<1			No Odor
25+	-	‡		-	X	70	<1			No Odor
30	BOTTOM OF BORING AT 26 FEET.									
Pro	oject: MONADNOCK oject No.: 031-02	1	LOG	C) F	` I	30R	ING	В	Fig.

Project: MONADNOCK Project No.: 031-02	- BOTTOM OF BORING AT 26 FEET.	25	20 Crey, damp, medium dense, silty SAND.	155	10 Light brown, damp, dense, fine to coarse	+Dark brown, damp, medium stiff, clayey SILT.	DESCRIPTION	SURFACE ELEVATION: NA	ш	DATE DRILLED/COMPLETED: 7-16-91 GEOLOGIST: J. REAMES
		SC S	£	**************************************	-++-++	<u> </u>	LITHOLOGIC LOG			
LOG	\	-+	++++++++		· · · · · · · · · · · · · · · · · · ·		WELL COMPLETION LOG	WELL SCREEN DEPTH:	WATER DEPTH	TOP OF CASING BORING DEPTH
OF		×	\bowtie	\bowtie	\bowtie	×	No. Type	EEN 0	PTH :	, w, ,
1		50	22	47	40	თ	Blow Count	19	z	. EE
30 R		<u>^</u>	7	Δ	7	4	Head- Space P]=	NONE F	ELEVATION:
BORING							Ground B	NA A	PENETRATE	T. BGS
B8		-					Drilling Rate(Time)		ATED	
		No Odor	No Odor	No Odor	No Odor	No Odor	REMARKS			
Elg.							(3)			

DATE	DRILLED/COMPLETED; 7-16-91	T	TOP OF C	ASIN	IG I	ELEV	ATION	: N/		
-	OGIST: J. REAMES		BORING D			_		T. BGS		
DRIL	.ER: B. NYDOSKE (CME 75)		WATER D	EPTH	1 :	N	ONE	PENET	RATED)
SURF	ACE ELEVATION: NA		WELL SC	REEN	I D	EPTH	t :	NA		
DEPTH(feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	No.			Head- Space V.O	(ppm)	Drilling Rate(Time)	REMARKS
-	Asphalt — 3 inches thick.		-							
	Grey, damp, medium dense, silty SAND.	SM		-						
5-	Light brown, damp, medium dense, fine to coarse SAND.	+ + + + + + + + + + + + + + + + + + + +			X	17	<1			No Odor
10	-	SW		-	X	35	<1			No Odor
15	Grey, moist, dense, coarse, sandy GRAVEL.	GW		-	X	53	<1			No Odor
20	- 	+		-	X	37	<1			No Odor
25	Brown, damp, stiff, silty CLAY.	CL		-	X	18	<1		ļ	No Odor
30	BOTTOM OF BORING AT 26 FEET.	+ + + + + + + +		-						
35		† † † † † † †		-						
Pre	oject: MONADNOCK oject No.: 031-02		LOG	C	F	` I	30F	ING	B9	Fig.

Project: MONADNOCK Project No.: 031-02	BOTTOM OF BORING AT 26 FEET.	N5-	Grey, moist, dense, coarse, sandy GRAVEL.	Grey, damp, dense, fine to coarse SAND.		Grey, damp, medium dense, silty SAND.	DESCRIPTION	(feet)	ELEVAT	DRILLER: B. NYDOSKE (CME 75)	DATE DRILLED/COMPLETED: 7-16-91 GEOLOGIST: J. REAMES
	+++++++++++++++++++++++++++++++++++++++	* ************************************		*	M SM SM	+ + + + + + + + + + + + + + + + + + + +	LITHOLO LOG	GIC	X	\$	® 3
LOG	 	 	+++++++	+++++++	 • • • • 	+ + + + +	WELL COMPLET LOG	TION	WELL SCREEN DEPTH:	WATER DEPTH :	TOP OF CASING ELEVATION: BORING DEPTH: 26 FT
OH			d	A X			No. Type	ω N	ENO	표 :	HILO SACS
		8 8	3 :	14	ō		Blow Count	AMP	팔	z	ELEV.
BORING		<u> </u>		<u>v</u> v	<u> </u>		Ilead- Space A			ONE P	ATION: NA 26 FT. BGS
ING							Back- Ground D	Ω	¥	ENET	. BGS
1							Drilling Rate(Tin	ne)		NONE PENETRATED	
B10 Fig.		No Odor		No Odor	No Odor	,	REMARKS				

DATE D	RILLED/COMPLETED: 7-16-91		TOP OF C	ACM	G F	3 EV	ATION	. NI	<u> </u>	
GEOLOG			BORING D					: NA T. BGS		
DRILLEF			WATER D					PENET)
	E ELEVATION: NA		WELL SC					NA		
										
DEPTH(feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	٧o.		Blow Count	PLE O.V.A.	(ppm)	Orilling Rate(Time)	REMARKS
+ D(ark brown, dry, stiff, sandy SILT.	+		-					_	
5++++++++++++++++++++++++++++++++++++++		# ML			X	10	<1			No Odor
10 +		+++++++++++++++++++++++++++++++++++++++			X.	14	<1			No Odor
15 - Lie	ght brown, damp, dense, fine to coarse AND with some GRAVEL.	+ + + + + + + + + + + + + + + + + + + +			X:	22	<1			No Odor
20+		sw			X;	50	<1			No Odor
25 	OTTOM OF BORING AT 26 FEET.	+		-	X	67	<1			No Odor
30 + + + + + + + + + + + + + + + + + + +		+++++++++++++++++++++++++++++++++++++++								
Proje	ect: MONADNOCK ect No.: 031-02		LOG	0	F	H	30R	ING	B1	1 Fig.

DATE DON LED COATH ETED 7 40 04		TOD OF 0	4 6 5 6		471014						
DATE DRILLED/COMPLETED: 7-16-91 GEOLOGIST: J. REAMES		TOP OF CASING ELEVATION : NA BORING DEPTH : 26 FT. BGS									
DRILLER: B. NYDOSKE (CME 75)		BORING DEPTH: 26 FT. BGS WATER DEPTH: NONE PENETRATED									
SURFACE ELEVATION: NA		WELL SCREEN DEPTH: NA									
TAN TAN TAN TAN TAN TAN TAN TAN TAN TAN	l					11/1					
DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	No.		PLE O.V.A.	Back- (Mdd)	Drilling Rate(Time)	REMARKS			
Dark brown, damp, stiff, silty CLAY.				1	14 02	ш					
5—————————————————————————————————————	+ + + + + + + + + + + + + + + + + + +		X		<1			No Odor			
10 +	+++++++++++++++++++++++++++++++++++++++		X		<1			No Odor			
Brown, damp, dense, fine to coarse SAND with some gravel.	+ + + + + + + + + + + + + + + + + + + +		X		<1			No Odor			
20 + + + + + + + + + + + + + + + + + + +	+ sw + + + + +		X		<1			No Odor			
25+	+		\mathbf{X}		<1			No Odor			
BOTTOM OF BORING AT 26 FEET.	+		-								
Project: MONADNOCK Project No.: 031-02		LOG	OF	FE	30R	ING	B1	2 Fig.			

Project: MONADNOCK Project No.: 031-02	BOTTOM OF BORING AT 26 FEET.	Grey, damp, dense, silty SAND with gravel.	Light brown, damp, stiff, clayey SILT.	10	Concrete - 5 inches thick. Dark brown, damp, stiff, silty CLAY.	DESCRIPTION LITHOLOGIC	ELEVATION: N.	ء اد	DATE DRILLED/COMPLETED: 7-17-91
LOG OF BORING B13	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	SM $+$ \times 60 <1 No Odor SW $+$ \times \times \times No Odor No Odor	16 <1 No Odor	18		WELL COMPLETION LOG No. Type Blow Count Head Space Ground Drilling Rate(Time) REMARKS	WELL SCREEN DEPTH: NA	· ·	BORING DEPTH : 26 FT BGS

E

DATE	DRILLED/COMPLETED: 7-17-91		TOP OF C	ASIN	IG 1	ELEV	ATION	:	NA				
	LOGIST: J. REAMES		TOP OF CASING ELEVATION: NA BORING DEPTH: 26 FT. BGS WATER DEPTH: NONE PENETRATED										
DRIL													
SURF	ACE ELEVATION: NA		WELL SCREEN DEPTH: NA										
DEPTH(feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	No.		Blow Count		(ppm)	Drilling Rate(Time)	REMARKS			
	Concrete — 5 inches thick.		-										
5	Dark brown, damp, stiff clayey SILT.	+ + + CL			X	12	<1			No Odor			
10	- - - - - - -	+		_ 1	X	18	<1			No Odor			
15-	Light brown, damp, stirt, clayey SILT.	ML	-	-	X		<1			No Odor			
20-	Light brown, damp, dense, silty SAND with gravel.	SM		-	X	94	<1			No Odor			
25-	Grey, damp, dense, coarse SAND with grave	sw	┨ — — — — — — — — — — — — — — — — — — —	-	X	36	<1			No Odor			
30	BOTTOM OF BORING AT 26 FEET.												
Pro	oject: MONADNOCK oject No.: 031-02		LOG	C) F	`]	30F	RING	В	Fig.			

DATE DRILLED/C		TOP OF CASING ELEVATION ; NA														
GEOLOGIST: J.		BORING DEPTH : 26 FT. BGS														
	DRILLER: REX (SIMCO 2400)						WATER DEPTH: NONE PENETRATED									
	SURFACE ELEVATION: NA					EPTH		NA								
DEPTH(teet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	Ö		Blow Count	PLF 0.V.A.	ock- round (S	Drilling Rate(Time)	REMARKS						
Conc	rete - 5 inches thick.		801	<u>z</u>	F	mu	= S	<u>m</u> u	OF							
+	own, damp, stiff, silty CLAY.	++++++++++++++++++++++++++++++++++++++				16	<1			No Odor						
15 + + + + + + + + + + + + + + + + + + +		+++++++++++++++++++++++++++++++++++++++			X	14	<1		·	No Odor						
‡	np, dense, silty SAND.	SM		-	X	80	<1			No Odor						
25 + Grey, moi gravel.	ist, dense, fine to coarse SAND wit	th‡ sw		-		90				No Odor						
	OF BORING AT 26 FEET.	- T		-		30	<1			THO COUNTY						
	MONADNOCK 0: 031-02		LOG	C)F	' F	30R	ING	В	15 Fig						

DATE	DRILLED/COMPLETED: 7-18-91		TOP OF CASING ELEVATION ; NA									
	OGIST: J. REAMES		BORING DEPTH : 26 FT. BGS									
DRILL			WATER DEPTH: NONE PENETRATED									
	ACE ELEVATION: NA		WELL SC					NA				
			·									
DEPTH(feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG			<u> </u>	PLE O.V.A.	(ppm)	Drilling Rate(Time)	REMARKS		
		<u> </u>	₹83	Ö	5	<u> </u>	Sp	& S	Q %			
5-	Concrete — 5 inches thick. Dark brown, damp, stiff, silty CLAY.	+			X	20	<1			No Odor		
10	- - - - - - -	CL			X:	20	<1			No Odor		
15	Grey, damp, medium dense, silty SAND.	+ + + + + + + + + + + + + + + + + + + +		_ 1	X	10	<1			No Odor		
20	- - - -	SM		-	X,	44	<1			No Odor		
25	-	+	 	- -		~	- 4			No Odor		
	Grey, moist, very dense, fine to coarse SANI BOTTOM OF BORING AT 26 FEET.	D. SW		-	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	60	<1			No Odol		
35	- · · · · · · · · · · · · · · · · · · ·	+++++++++++++++++++++++++++++++++++++++		-								
	oject: MONADNOCK oject No.: 031-02		LOG	С	F	E	30R	ING	В	Fig.		

DATE DRILLED/COMPLETED: 7-18-91		TOP OF C	ASING	ELE	VATION	:	NA					
GEOLOGIST: J. REAMES		BORING DEPTH : 26 FT. BGS										
DRILLER: REX (SIMCO 2400)		WATER DEPTH : NONE PENETRATED										
SURFACE ELEVATION: NA		WELL SC	REEN I	DEPT	H:	NA						
		,										
DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	5		·	(ppm)	Drilling Rate(Time)	REMARKS				
	LITH	WEL COM LOG	No.	Blow	Head- Space	Back- Ground	Dril Rat					
Concrete — 5 inches thick. Dark brown, damp, sti ff, silty CLAY.	+		-									
5 +			Σ		<1			No Odor				
10	+ + + + + + + + + + + + + + + + + + + +		<u> </u>		<1			No Odor				
15 Grey, damp, medium dense, silty fine SAND	SM	-	X		<1			No Odor				
20 Light brown, damp, dense, fine to coarse sandy GRAVEL.	GW		<u> </u>		<1			No Odor				
25—	<u> </u>		- X		<1			No Odor				
BOTTOM OF BORING AT 26 FEET.	‡ +		- - -									
30 +	+		-									
Project: MONADNOCK Project No.: 031-02		LOG	0]	F'	BOR	ING	В	17 Fig.				

DATE	DRILLED/COMPLETED: 7-18-91		TOP OF C	ASIN	IG E	ELEV	ATION	 :	NA	
	OGIST: J. REAMES		BORING D		_		26 FT.			
DRILL	ER: REX (SIMCO 2400)		WATER D	PTH	1:	N	ONE P	ENETF	ATED	
SURF	ACE ELEVATION: NA		WELL SC	_				NA		
DEPTH(feet)	DESCRIPTION	LITHOLOGIC LOG	WELL COMPLETION LOG	No.				(ppm)		REMARKS
	Concrete - 5 inches thick.	 			Ì	-				
5	Dark brown, damp, medium stiff, silty CLAY.	CL			X	6	<1			No Odor
10		- OL		-	X	16	<1			No Odor
15				-	X	14	<1			No Odor
20	Light brown, moist, de n se, fine SAND.	SP		-	X	100	<1			No Odor
25 🕂	-	_	-	-	Δ	50/ 4"	<1			No Odor
30	BOTTOM OF BORING AT 26 FEET.						7			- Sudi
Pro	oject: MONADNOCK oject No.: 031-02		LOG	C	F	' F	30R	ING	В	18 Fig.

DATE	DRILLED/COMPLETED: 7-19-91		TOP OF C	ASI	IG 1	ELEV	ATION	:	NA	
GEOL	OGIST: J. REAMES		BORING D	EPT	н ;	1	26 FT.	BGS		
DRILL			WATER D					ENETF	RATED	
SURF	ACE ELEVATION: NA		WELL SC	REE	N DI	EPTI	1:	NA	·	
<u></u>										,
DEPTH(feet)	DESCRIPTION	LITHOLOGIC LOG	WELL COMPLETION LOG	No.			Head- Space Space	Beck- dd Ground H	Drilling Rate(Time)	REMARKS
	Concrete — 5 inches thick.	$\overline{}$								
5	Dark brown, damp, stiff, silty CLAY.	++++++++++++++++++++++++++++++++++++++		_	X	14	<1			No Odor
10	- - - -	+++++++++++++++++++++++++++++++++++++++		_	X	14	<1			No Odor
15	- - - -	+ + + + + + + + + + + + + + + + + + + +			X	14	<1			No Odor
20-	Brown, damp, stiff, clayey SILT.	ML.		_	X	22	<1			No Odor
25 +	Brown, moist, dense, fine to coarse SAND.	SW	1 +	-	X	32	<1			No Odor
30	BOTTOM OF BORING AT 26 FEET.	+								
35 🕂	_		<u> </u>	_						
1	oject: MONADNOCK oject No.: 031-02		LOG	C	F	' I	30R	ING	B1	9 Fig.

30 + + + + + + + + + + + + + + + + + + +	25 + BOTTOM OF BORING AT 26 FEET. +	20	15	10	5	Dark brown, damp, stiff, silty CLAY.			SURFACE ELEVATION: NA	(SIMC	ı	DATE DRILLED/COMPLETED: 7-18-91
LOG OF BORING B20 Fig.	SW +	62 <1 No Odor	**************************************	14	C No Odor		LOG WELL COMPLE LOG No. Type Blow Count Head- Space Book- Ground Drilling Rate(Tir	SAMPLES	WELL SCREEN DEPTH: NA	WATER DEPTH: NONE PENETRATED	BGS	TOP OF CASING ELEVATION : NA

Pro	30	δ	15	10	<u> </u>		DEPTH(feet)	SE SE	DRILLER:	GEO!	DATE
Project: MONADNOCK Project No.: 031-02	BOTTOM OF BORING AT 26 FEET.	Brown, moist, dense, f ine to coarse SAND with some gravel.				Concrete - 5 inches thick. Dark brown, damp, stiff, silty CLAY.	DESCRIPTION	SURFACE ELEVATION: NA	(SIMC	i I	DATE DRILLED/COMPLETED: 7-19-91
		* • • • • • • • • •	++++++++++	<u> </u>	-+-	1 1	LITHOLOGIC LOG			ro.	
LOG	 		+ + + + + +) I + + + + + +	VELL COMPLETION LOG	WELL SCHEEN DEPIH:	WATER DEPTH :	BORING DEPTH :	TOP OF CASING
OF		M M	M	\bowtie	M	T	ype 🕜		Ξ	크	6
		10 84	4	24	1 8	E	Blow Dount	15	z		ELEV
BORING		<u> </u>	<u> </u>	<u> </u>	Δ		Blow Count O. V. A. P. L. C. C. C. C. C. C. C. C. C. C. C. C. C.		m	26 FT. BGS	ELEVATION ;
ING						The state of the s	Rack- pp ()	Z	NE T	GS	
l w						I F	Orilling Rate(Time)		PENETRATED		Z
21 Fig.		No Odor	No Odor	No Odor	No Odor		REMARKS				

DATE DRILLED/COMPLETED: 7-22-91		TOP OF C	ASIN	G E	LEVATION :	N/		
GEOLOGIST: J. REAMES		BORING D				T. BGS		
DRILLER: B. NYDOSKE (CME 75)		WATER D)
SURFACE ELEVATION: NA		WELL SC	REEN	DE	PTH :	NA		
DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG			O.V.A.	(ppm)	Drilling Rate(Time)	REMARKS
	LITH	₹83 <u>3</u>	o Z	E E	Count Head- Space	Back- Groun	Dr Ra	
Asphalt — 3 inches thick. Dark brown, damp, stiff, silty CLAY.	+			X	<1			No Odor
10 + + + + + + + + + + + + + + + + + + +	CL			X	<1			No Odor
Brown, damp, dense, fine to coarse SAND with gravel.	+ + + + + + + + + + + + + + + + + + + +	-	- 2	X	<1			No Odor
20	÷ sw			X	<1			No Odor
25 🕂	Ŧ	1		X	<1			No Odor
BOTTOM OF BORING AT 26 FEET.	+ + + + + + + + + + + + + + + + + + + +		-		< 1			
Project: MONADNOCK		IAA		יבד	DAD	INIC	D O	Fig.
Project No.: 031-02		LUG	0	T	BOR	ING	<u>R</u>	

Project: MONADNOCK Project No.: 031-02	30 ++++++++++++++++++++++++++++++++++++	25	20	15	10 - Grey, damp, very dense, clayey SAND.	5 +	DESCRI	DATE DRILLED/COMPLETED: 7-22-91 GEOLOGIST: J. REAMES DRILLER: B. NYDOSKE (CME 75) SURFACE ELEVATION: NA
LOG	 	& 4	-++-	% %	-++++++	Ω	LITHOLOGIC LOG WELL COMPLETION LOG	BORING DEPTH WATER DEPTH WELL SCREEN
G OF BORING		86 A	% 2 2	<u>√</u>	######################################	28 A	No. Type Blow Count Head- Space No. AMPL	CASING ELEVATION DEPTH: 26 DEPTH: NONE CREEN DEPTH:
NG B23 Fig		No Odor	No Odor	No Odor	No Odor	No Odor	Drilling Rate(Time)	FT. BGS PENETRATED NA

DATE	DRILLED/COMPLETED: 7-22-91		TOP OF CA	SING	ELEV	ATION	: NA		
GEOL	OGIST: J. REAMES		BORING DE	PTH	:	26 F	T. BGS	3	
DRALL	ER: B. NYDOSKE (CME 75)	_	WATER DE	PTH :	N	ONE F	PENET	RATEC)
SURF	ACE ELEVATION: NA		WELL SCR	EEN (EPTH	1:	NA		
DEPTH (feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG		,		(ppm)	Drilling Rate(Time)	REMARKS
5	Asphalt — 3 inches thick. Dark brown, damp, stiff, silty CLAY.	CL							
10-		+ + + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + + +	X		<1			No Odor
+	Light brown, damp, dense, clayey SAND.	sc +	+	X		<1			No Odor
	Light brown, damp, dense, fine to coarse SAND with some gravel.	+		X		<1			No Odor
20	-	SM	+	X		<1			No Odor
25‡	•	‡	+	Δ		<1			No Odor
+++++++++++++++++++++++++++++++++++++++	BOTTOM OF BORING AT 26 FEET.	+	+						
30 +		+++++++++++++++++++++++++++++++++++++++	+++++++++++++++++++++++++++++++++++++++						
Pro	eject: MONADNOCK eject No.: 031-02		LOG	ΟI	r I	30R	ING	В	Fig.

Project: MONADNOCK Project No.: 031-02	**BOTTOM OF BORING AT 26 FEET.	75		15 Light brown, damp, dense, fine to coarse SAND with some GRAVEL.	10	Brown, damp, stiff, clayey SILT.	DESC	SURFACE ELEVATION: NA	DRILLER: B. NYDOSKE (CME 75)	GEOLOGIST: J. REAMES	DATE DRILLED/COMPLETED: 7-22-91
	 	-+ + + + +	S	+++++	80	<u> </u>	LITHOLOGIC LOG				
LOG	 		 	1.1.1.			WELL COMPLETION LOG	WELL SCREEN DEPTH:	WATER DEPTH :	BORING DEPTH	
0F		×	M	M	\square	M	No. Type	EN D	HT'		CASING
		79	<u>ი</u>	2	32	თ 	Blow Count A	HIA	z		¥ H
)OR		4	<u>^</u>	7	<u>^</u>	7	Head-Space PLES		NONE	: 26 F	2
BORING							Ground B	A N	PENETRATE	26 FT. BGS	
82							Drilling Rate(Time)		ATED		
25 Fig.		No Odor	No Odor	No Odor	No Odor	No Odor	REMARKS				

DATE	DRILLED/COMPLETED: 7-22-91		TOP OF CAS	SING	ELEV	ATION	; NA			
-	OGIST: J. REAMES		BORING DEP				T. BGS			
DRILL	ER: B. NYDOSKE (CME 75)		WATER DEP	TH:	N	IONE I	PENET	RATED)	
SURF	ACE ELEVATION: NA	_	WELL SCRE	EN D	EPTI	1:	NA			
DEPTH(feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	٠	Blow Count	Head- V.O. Space P.A.O	Back- C C C C C C C C C C C C C C C C C C C	Drilling Rate(Time)	REMAF	RKS
5	Asphalt — 3 inches thick. Brown, damp, stiff, clayey SILT.	ML	+++++++++++++++++++++++++++++++++++++++	X	4	<1			No Odor	
10	- - - - - -	+ + + + + + + + + + + + + + + + + + + +	+ + + + + + + + + + + + + + + + + + + +	X	15	<1			No Odor	
15	Brown, moist, loose, fine to coarse SAND.	sw		X	9	<1			No Odor	
	White, damp, dense, fine to coarse sandy GRAVEL.	GW	+ + + + + + + + + + + + + + + + + + + +	X	49	<1			No Odor	
25	-	+		X	78	<1			No Odor	
30	BOTTOM OF BORING AT 26 FEET.		+							
Pro	oject: MONADNOCK oject No.: 031-02		LOG	ΟF	- I	30R	ING	В2	26	Fig.

•

P r Pr	30	N U	າ ວ ວ ໄ	10	σ ₁		DEPTH(feet)	SURFACE		T T
Project: MONADNOCK Project No.: 031-02	F BORING AT 26 FEET.	Light brown, moist, medium dense, fine SAND.	Brown, damp, dense, fine to coarse SAND with gravel.		Dark brown, damp, very stiff, silty CLAY.	Asphalt — 3 inches thick. Brown, damp, stiff, clayey SILT.	DESCRIPTION		ELEVATION: NA	GEOLOGIST: J. HEAMEN	ğ
	 	&	S	۶ ۱۱۰۱۰۰۰۰۱۰	+++++++		LITHOLOGIC LOG				
LOG	1		 		++++++	ļ	WELL COMPLETION LOG	N	WELL SCREEN DEPTH :	WATER DEPTH	TOP OF CASING
0		× ×	1 🖂	×	×		No. Type	,	EEN		SING
T		45 27		76	, i				91	-	Aara
30F		<u>^</u> _	<u>^</u>	Δ	Δ		Blow Count O.V.A		[ONE PE	ELEVATION :
BORING							Back- Pp D	2	NA !	NONE PENETRATED	71 1
B2							Drilling Rate(Time)			ATED	
27 Fig.		No Odor	No Odor	No Odor	No Odor		REMARKS				

DATE	DRILLED/COMPLETED: 7-23-91		TOP OF C	ASIN	IG F	LEV	ATION	. NA	<u> </u>	
	OGIST: J. REAMES		BORING D					T. BGS		
DRILL			WATER D						RATED)
	ACE ELEVATION: NA		WELL SC	REEN	I DE			NA		
										······································
DEPTH (feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG				Head- Space Space	Beck- () C. Ground ()		REMARKS
		133	≥27	Š.	Ty	ಹೆತಿ	Sp Sp	Ba	<u> </u>	
5	Asphalt — 3 inches thick. Brown, damp, stiff, clayey SiLf.	# ML		-		15	<1			No Odor
15	Brown, moist, loose, silty SAND.	SM		- - - -	X	10	<1			No Odor
20-	Brown, moist, medium dense, clayey SAND wit gravel	thr sc		-	X	16	<1			No Odor
25 -	Grey, moist, dense, coarse, sandy GRAVEL.	GW	+	-	∇	84	<1			No Odor
30	BOTTOM OF BORING AT 26 FEET.	+ + + + + + + + + + + + + + + + + + + +								,
	oject: MONADNOCK oject No.: 031-02		LOG	С	F	' I	30R	ING	B2	28 Fig.

Pr	30	25	N 0	15	10	On	DEPTH(feet)	HUS	DA	OF DATE
Project: MONADNOCK Project No.: 031-02		Grey, moist, dense, coarse, sandy GRAVEL. BOTTOM OF BORING AT 26 FEET.	Brown, moist, dense, silty fine SAND.	Brown, moist, stiff clayey SILT.	Brown, damp,medium dense, clayey, fine SAND.	Brown, damp, stiff, clayey SILT.	DESCRII			<u>π</u>	DATE DRILLED/COMPLETED: 7-23-91 GEOLOGIST: J. REAMES
	, +- + + + + + + + 	GW	& & & & & & & & & & & & & & & & & & &	<u> </u>	SC SC		LITHOLOG	GIC			
LOG							WELL COMPLET LOG	ION	WELL SCREEN DEPTH:	WATER DEPTH:	TOP OF CASING BORING DEPTH
0				N. A.	· · · · · · · · · · · · · · · · · · ·		No.		AE E	ЕРТН	CASING:
田		49	⊠	<u>№</u>	 18	— ⊠ ∞	Type Blow Count	SAI	0EP		1 2 1
BOR		<u>^</u>	<u>^</u>	4	Δ	<u>7</u>	Head- V Space >	AMPLE		NONE F	ELEVATION :
BORING							Back- Ground D	<u>(7)</u>	AN	PENETRATED	VIION: NA 26 FT. BGS
82							Drilling Rate(Tim	ne)		RATED	
29 Fig.		No Odor	No Odor	No Odor	No Odor	No Odor	REMARKS				

Project: MONADNOCK Project No.: 031-02	30 + + + + + + + + + + + + + + + + + + +	ense, coarse, s	20	15 Brown, damp, medium dense, silty fine SAND.	10 — Some sand at 10 feet.	Cn 	Asphalt - 3 inches thick. Brown, damp, stiff, clayey S!LT.	ESCR	[eet]	SURFACE ELEVATION: NA	B. NYDOSI	DATE DRILLED/COMPLETED: 7-23-91 GEOLOGIST: J. REAMES
	 	GW	**************************************	• • • • • • • • • • • • • • • • • • • •		<u></u>		LITHOLO LOG	GIC			m -
LOG			! 		 		-1 - 1 - 1 - 1	WELL COMPLET LOG	NOI	WELL SCREEN DEPTH:	WATER DEPTH:	TOP OF CASING BORING DEPTH
0		<u> </u>	\bowtie	\bowtie	\bowtie	\bowtie		No. Type	N	NEW C	HIG	
T		28	13	22	15	9		Blow Count	ΑM) EPH		HEIB
BORING		<u>^</u>	7	<u> </u>	Δ	<u> </u>		Head- V. Space A			斋	ELEVATION: 26 FT.
ING								Back- PPB	ζΩ	×	ENETE	NA BGS
								Drilling Rate(Tin	ne)		PENETRATED	
B30 Fig.		No Odor	No Odor	No Odor	No Odor	No Odor		REMARKS				

DATE DRILLED/COMPLETED: 7-23-91		TOP OF C	CASIN	G E	LEV	TION	N/		
GEOLOGIST: J. REAMES		BORING [T. BGS		
DRILLER: B. NYDOSKE (CME 75)		WATER D	EPTH	:	N		ENET)
SURFACE ELEVATION: NA		WELL SO	REEN	DE	PTH	:	NA		
				-					-
DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	No.		(Beck- d) (7) Ground mdd	Drilling Rate(Time)	REMARKS
Asphalt — 3 inches thick. Dark brown, damp, stiff, silty CLAY.	+	-							
5 + + + + + + + + + + + + + + + + + + +	† CL	-		X		<1			No Odor
Dark brown, damp, medium dense, clayey SAND.	sc sc	-		X		<1			No Odor
20	+ + + + + + + + + + + + + + + + + + + +			X		<1			No Odor
SAND.	sw	-		X		<1			No Odor
Brown, moist, dense, coarse sandy GRAVEL. BOTTOM OF BORING AT 26 FEET.	GW			X_	$\frac{1}{1}$	<1			No Odor
5	+ + + + + + + + + + + + + + + + + + + +								
Project: MONADNOCK		100	\sim	<u></u>	Τ-)	TNIC	О.	zz Fig.
Project No.: 031-02		LOG	U	Г	上	UK	IING	D,	

DATE	DRILLED/COMPLETED; 7-23-91		TOP OF C	ASE	NG 1	ELFV	ATION	: N/		
	OGIST: J. REAMES		BORING D			_		T. BGS		
DRILL			WATER D						RATEL)
	ACE ELEVATION: NA		WELL SC					NA		
	THE LIE VALUE . IN									
DEPTH(foet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG	ďo.		Blow Count	1	(ppm)	Drilling Rate(Time)	REMARKS
	Asphalt - 3 inches thick.		-	 -			V2			
5	Dark brown, damp, stiff, silty CLAY.	+ + + + + + + + CL			X	12	<1			No Odor
10	- - - -	+		-	X	10	<1			No Odor
15	<u>-</u> - - -	+++++++++++++++++++++++++++++++++++++++		· — · · · · · · · · · · · · · · · · · ·	X	8	<1			No Odor
20	Light brown, damp, dense, fine SAND.	SP		- -		39				No Odor
25 –	Brown, moist, dense, coarse sandy GRAVEL.	GW	-	-	X	50/ 3"	<1			No Odor
30	BOTTOM OF BORING AT 26 FEET.	+++++++++++++++++++++++++++++++++++++++		-						
	oject: MONADNOCK		<u> </u>				-			Fig.
	oject No.: 031-02		LOG		F	`]	30R	ING	В	34

DATE	DRILLED/COMPLETED: 7-23-91		TOP OF C	ASI	IG I	ELEV	/ATIO	N :	N/	-		
\vdash	OGIST: J. REAMES		BORING D					FT. E				
DRILL	LER: B. NYDOSKE (CME 75)		WATER D	EPTH	1:	١	IONE	PEN	ET	RATED)	
SURF	ACE ELEVATION: NA		WELL SC	REE	N DI	EPTI	1:	NA				
			,					····		. ——		
DEPTH(feet)	DESCRIPTION	LITHOLOGIC	WELL COMPLETION LOG			AM	0. v.	ES A. (pi	pm)	Drilling Rate(Time)	REMA	RKS
Ä		10G	WEI	Š.	Type	Blow	Head	Spac	Grou	Dri Rat		
-	Asphalt — 3 inches thick. Dark brown, damp, stiff, silty CLAY.	+										
5-		÷ CL			X	8	<1				No Odor	
10-	- - - - -	+ + + + + + + + + + + + + + + + + + + +	-		X	11	<1				No Odor (Wood Fragments)	
15	Light brown, damp, dense, fine to coarse SAND with some GRAVEL.	+ + + + + + + + + + + + + + + + + + + +			X	40	<1			·	No Odor	
20-	- - - -	÷ → sw	-		X	44	<1				No Odor	
25	•	+		-								
25	Light brown, moist, dense, fine SAND.	SP			X	77	<1				No Odor	
	BOTTOM OF BORING AT 26 FEET.	‡ ‡ ‡		- - -								
30	-	‡ † † † †		-								
Pro	oject: MONADNOCK oject No.: 031-02		LOG		F	' I	30	RIN	IG	В3	35	Fig

APPENDIX D CHAIN-OF-CUSTODY FORMS AND ANALYTICAL LABORATORY REPORTS

ı	CLIENT						CHA	IN (OF CU	ST	OD	Y REC	OR	RD														
	NAME: IDEA _						RI	EOU	EST F	OR	AN	IALYS:	IS											orpore I Labo		!		
İ	ADDRESS: 11325	Gold	errod					DA	EST FO	<u>s /9</u>	1							L	1	7 _	•	630 1	Maple	Ave.		ries		
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(3) 910738

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		emes / to	Il rea		NORMA RUSH			5	8010/601	809/0808	8240/624	8270/625	CAM Metals						
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(3) 910738

CLIENT NAME: ADDRESS: PHONE NO. PROJECT NAME: SEND REPORT TO:	Galdeniso Cin Valley 741 FAX NO.	5000	CHAIN REQU	OF CU JEST F DATE: 7 PAGE 3				O			G	K	7	Ana 630 Torra Tel:	lytice Maple ance, (213-	corpoi al Lab e Ave. Calif. 9 618-88	orato 90503 889	ories		
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SAMPLER NAME/SIGNATION REAL	mestal	Lean		NORM RUSH]		M8015 8010/601	8020/602	809/0	8240/624 8270/625	CAM Metals								
SAMPLE NUMBER	SAMPLING DATE/TIME	PRESER-	CONTAINER SIZE/TYPE	SAMPLI		PTION OTHER	418.1	M8015 8010/60	802(808	8240 8270	₹			,	Ş.				
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C K Y incorporated Analytical Laboratories

Date: 07/22/91

910738

IDEA

11325 Goldenrod

Fountain Valley, CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the laboratory report for samples received on 07/15/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

Method

No. of Analysis

EPA 8010

30 Soils

The results are summarized on seven pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

IDEA CLIENT: DATE REC'D: 07/15/91 PROJECT: MONADNOCK DATE EXTRACTED: N/A CONTROL NO: 910738 DATE ANALYZED: 07/17/91 MATRIX TYPE: Soil SAMPLE ID: BLANK B1-5' B1-10' B1-15' B1-20' B1-25' **CONTROL NO.: 910738** -1 -2 -3 -4 -5 DETEC. LIMIT PARAMETERS (8010) RESULT (ug/kg) (ug/Kg) Dichlorodifluoromethane ND ND ND ND ND ND 20 Chloromethane ND ND ND ND ND ND 20 Vinyl Chloride ND ND ND ND ND ND 20 Bromomethane ND ND ND ND ND ND 20 Chloroethane ND ND ND ND ND ND 20 Trichlorofluoromethane ND ND ND ND ND ND 5 1,1-Dichloroethene ND ND ND ND ND ND 5 Methylene Chloride ND ND ND ND ND ND 5 Trans-1,2-Dichloroethene ND ND ND ND ND ND 5 1,1-Dichloroethane ND ND ND ND ND ND 5 Chloroform ND ND ND ND ND ND 5 1,1,1-Trichloroethane ND ND ND ND ND 5 ND Carbon Tetrachloride ND ND ND ND ND ND 5 1.2-Dichloroethane ND ND ND ND ND ND 5 Trichloroethene ND ND ND ND ND ND 5 1,2-Dichloropropane ND ND ND ND ND ND 5 Bromodichloromethane ND ND ND ND ND ND 5 2-Chloroethylvinylether ND ND ND ND ND ND 5 Trans-1,3-Dichloropropene ND ND ND ND ND ND 5 Cis-1,3-Dichloropropene ND ND ND ND ND ND 5 1.1.2-Trichloroethane ND ND ND ND ND ND 5 Tetrachloroethene ND ND 7 12 9 5 ND Dibromochloromethane ND ND ND ND ND ND 5 ND Ethylene Dibromide ND ND ND 5 ND ND Chlorobenzene ND ND ND ND ND ND 5 ND Bromoform ND ND ND ND 5 ND 1,1,2,2-Tetrachloroethane ND ND ND ND ND ND 5 Chlorotoluene ND ND ND ND ND ND 5 M-Dichlorobenzene ND ND ND ND ND ND 5 P-Dichlorobenzene ND ND ND ND ND ND 5 Benzylchloride ND ND ND ND ND ND 5 O-Dichlorobenzene ND ND ND ND ND ND 5 % Surrogate Recovery: 100 101 104 104 104 112

CLIENT: PROJECT:

MONADNOCK

DATE REC'D: 07/15/91 DATE EXTRACTED: N/A

CONTROL NO: 910738

DATE ANALYZED: 07/17/91

MATRIX TYPE:

SAMPLE ID: CONTROL NO.: 910738	B2-5' -6	B2-10' -7	B2-15' -8	B2-20' -9	B2-25' -10	B3-5' -11	DETEC.
PARAMETERS (8010)			RESULT (u	g/kg)			LIMIT (ug/Kg)
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND.	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	ND	5
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	ND	5
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Trichloroethene	ND	ND	ND	ND	ND	ND	- 5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	6	ND	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
% Surrogate Recovery:	104	102	104	106	106	105	

CLIENT: IDEA DATE REC'D: 07/15/91 PROJECT: MONADNOCK DATE EXTRACTED: N/A CONTROL NO: 910738 DATE ANALYZED: 07/17/91 MATRIX TYPE: Soil SAMPLE ID: B3-10' B3-15' B3-20' B3-25' B4 - 5'**CONTROL NO.: 910738** -12-13-14-16 -17DETEC. LIMIT PARAMETERS (8010) RESULT (ug/kg) (ug/Kg) ND ND Dichlorodifluoromethane ND ND ND 20 ND ND ND ND Chloromethane ND 20 ND ND ND Vinyl Chloride ND ND 20 Bromomethane ND ND ND ND ND 20 Chloroethane ND ND ND ND ND 20 Trichlorofluoromethane ND ND ND ND ND 5 ND ND ND ND 1,1-Dichloroethene ND 5 Methylene Chloride ND ND ND ND ND 5 Trans-1,2-Dichloroethene ND ND ND ND ND 5 1,1-Dichloroethane ND ND ND ND ND 5 Chloroform ND ND ND ND ND 5 ND ND 1,1,1—Trichloroethane ND ND ND 5 Carbon Tetrachloride ND ND ND ND ND 5 1.2-Dichloroethane ND ND ND ND 5 ND Trichloroethene ND ND ND ND ND 5 ND ND ND 1,2-Dichloropropane ND ND 5 ND Bromodichloromethane ND ND ND ND 5 2-Chloroethylvinylether ND ND ND ND ND 5 Trans-1,3-Dichloropropene ND ND ND ND ND 5 ND ND Cis-1,3-Dichloropropene ND ND ND 5 1.1.2-Trichloroethane ND ND ND ND ND 5 Tetrachloroethene ND ND ND ND ND 5 Dibromochloromethane ND ND ND ND ND 5 Ethylene Dibromide ND ND ND ND ND 5 Chlorobenzene ND ND ND ND ND 5 ND ND **Bromoform** ND ND ND 5 1,1,2,2-Tetrachloroethane ND ND ND ND ND 5 Chiorotoluene ND ND ND ND ND 5 M-Dichlorobenzene ND ND ND ND ND 5 P-Dichlorobenzene ND ND ND ND ND 5 Benzylchloride ND ND ND ND ND 5 O-Dichlorobenzene ND ND ND ND ND 5 % Surrogate Recovery: 110 108 110 106 106

CLIENT: IDEA DATE REC'D: 07/15/91 PROJECT: MONADNOCK DATE EXTRACTED: N/A **CONTROL NO:** 910738 DATE ANALYZED: 07/17/91 MATRIX TYPE: Soil SAMPLE ID: B4-10' B4-15' B4-20' B4-25' B5-5' B5-10' **CONTROL NO.: 910738** -18-19-20 -21 -22-23 DETEC. LIMIT PARAMETERS (8010) RESULT (ug/kg) (ug/Kg) Dichlorodifluoromethane ND ND ND ND ND ND 20 Chloromethane ND ND ND ND ND ND 20 Vinyl Chloride ND ND ND ND ND ND 20 Bromomethane ND ND ND ND ND 20 ND Chloroethane ND ND ND ND ND ND 20 Trichlorofluoromethane ND ND ND ND ND 5 ND 1.1-Dichloroethene ND ND ND ND ND 5 ND ND ND ND Methylene Chloride ND ND ND 5 Trans-1,2-Dichloroethene ND ND ND ND ND ND 5 1.1-Dichloroethane ND ND ND ND ND ND 5 Chloroform ND ND ND ND ND 5 ND 1,1,1-Trichloroethane 5 ND ND ND ND ND ND 5 Carbon Tetrachloride ND ND ND ND ND ND 1.2-Dichloroethane ND ND ND ND ND ND 5 Trichloroethene ND ND ND ND 5 ND ND 1,2-Dichloropropane ND ND ND ND ND ND 5 Bromodichloromethane ND ND ND ND ND 5 ND 2-Chloroethylvinylether ND ND ND ND ND ND 5 Trans-1,3-Dichloropropene ND ND 5 ND ND ND ND Cis-1,3-Dichloropropene ND ND ND ND ND ND 5 1.1.2-Trichloroethane ND ND ND ND ND ND 5 Tetrachloroethene ND ND ND ND ND ND 5 Dibromochloromethane 5 ND ND ND ND ND ND Ethylene Dibromide ND ND ND ND ND ND 5 Chlorobenzene ND ND ND ND 5 ND ND **Bromoform** ND ND ND ND ND ND 5 1,1,2,2-Tetrachloroethane ND ND ND ND ND ND 5 Chlorotoluene ND ND ND ND ND ND 5 M-Dichlorobenzene ND ND ND ND ND ND 5 P-Dichlorobenzene ND ND ND ND ND ND 5 Benzylchloride ND ND ND ND ND ND 5 O-Dichlorobenzene ND ND ND ND ND ND 5 % Surrogate Recovery: 112 104 112 110 104 110

CLIENT: IDEA DATE REC'D: 07/15/91 MONADNOCK PROJECT: DATE EXTRACTED: N/A CONTROL NO: 910738 DATE ANALYZED: 07/17/91 MATRIX TYPE: Soil SAMPLE ID: B5-15' B5-20' B5-25' B6-5' B6-10' B6-25' **CONTROL NO.: 910738** -23-25-26-27 -28-29DETEC. LIMIT PARAMETERS (8010) RESULT (ug/kg) (ug/Kg) Dichlorodifluoromethane ND ND ND ND ND ND 20 Chloromethane ND ND ND ND ND ND 20 Vinyl Chloride ND ND ND ND ND 20 ND Bromomethane ND ND ND ND ND ND 20 Chloroethane ND ND ND ND ND ND 20 Trichlorofluoromethane ND ND ND ND ND ND 5 1.1-Dichloroethene ND ND ND ND ND ND 5 Methylene Chloride ND ND ND ND ND 5 ND Trans-1,2-Dichloroethene ND ND ND ND ND ND 5 1,1-Dichloroethane ND ND ND 5 ND ND ND Chloroform ND ND ND ND ND ND 5 1,1,1-Trichioroethane ND 5 ND ND ND ND ND Carbon Tetrachloride ND ND ND ND ND ND 5 1.2-Dichloroethane ND ND ND ND ND ND 5 Trichloroethene ND ND 8 ND ND ND 5 1,2-Dichloropropane ND ND ND ND ND 5 ND Bromodichloromethane ND ND ND ND ND ND 5 2-Chloroethylvinylether ND ND ND ND ND 5 ND Trans-1,3-Dichloropropene ND ND ND ND ND ND 5 Cis-1,3-Dichloropropene ND ND ND ND ND ND 5 1.1.2-Trichloroethane ND ND ND ND ND ND 5 Tetrachloroethene ND ND 7 ND ND ND 5 Dibromochloromethane ND ND ND ND ND ND 5 Ethylene Dibromide ND ND ND ND ND ND 5 Chlorobenzene ND ND ND ND ND ND 5 **Bromoform** ND ND ND ND ND ND 5 1,1,2,2-Tetrachloroethane ND ND 5 ND ND ND ND Chlorotoluene ND ND ND ND ND ND 5 M-Dichlorobenzene ND ND 5 ND ND ND ND P-Dichlorobenzene ND ND ND ND ND ND 5 Benzylchloride ND ND ND ND ND ND 5 O-Dichlorobenzene ND ND ND ND ND ND 5 % Surrogate Recovery: 108 108 106 108 106 102

CLIENT: PROJECT: CONTROL NO: MATRIX TYPE:	IDEA MONADNOCK 910738 Soil		DATE EXTRACTE DATE ANALYZED	: 07/17/91
SAMPLE ID:	*========	B6-15'	B6-20'	=======
CONTROL NO.:	910738	-30	_31	
				DETEC.
				⊔MIT
PARAMETERS (3010)	RESULT (ug/kg)	(ug/ Kg)
Dichlorodifluoror	nethane	ND	ND	20
Chloromethane		ND	ND	20
Vinyl Chloride		ND	ND	20
Bromomethane		ND	ND	20
Chloroethane		ND	ND	20
Trichlorofluorom	ethane	ND	ND	5
1,1-Dichloroeth		ND	ND	5
Methylene Chlor		ND	ND	.5
Trans-1,2-Dich		ND	ND	5
1,1-Dichloroeth		ND	ND	5
Chloroform		ND	ND	5
1,1,1-Trichloroe	thane	ND	ND	5
Carbon Tetrachle		ND	ND	5
1,2-Dichloroeth		ND	ND	5
Trichloroethene		ND	ND	5
1,2-Dichloropro	pane	ND	ND	5
Bromodichlorom		ND	ND	5
2-Chloroethylvir		ND	ND	5
Trans-1,3-Dich		ND	ND	5
Cis-1,3-Dichlor		ND	ND	5
1,1,2—Trichloroe		ND	ND	5
Tetrachloroethen		ND	ND	5
Dibromochlorom		ND	ND	5
Ethylene Dibrom		ND	ND	5
Chlorobenzene	ide	ND	ND	5
Bromoform		ND	ND	3
1,1,2,2-Tetrachl	oroethane	ND	ND ND	5 5
Chlorotoluene	Oloculario	ND	ND	5
M-Dichlorobenz	ene	ND	ND	5
P-Dichlorobenz		ND	ND	5
Benzylchloride	Onlo	ND	ND ND	5
O-Dichlorobenz	ene	ND	ND	5
% Surrogate Rec	overy:	110	105	

QUALITY CONTROL DATA

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910738

METHOD

EPA 8010

MATRIX:

Soil

SAMPLE ID:

910738-4

COMPOUND RES	SULTS SI	MOUNT PIKED % 1g/kg)	REC.	DUP. <u>% REC.</u>	<u>RPD</u>
11-DCE	ND	50	84	88	5
Benzene	ND	50	111	109	2
TCE	ND	50	116	114	2
Toluene	ND	50	108	109	1
Chlorobenzene	ND	50	112	112	0

METHOD

EPA 8010

MATRIX:

Soil

SAMPLE ID:

910738-30

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT <u>SPIKED</u> (ug/kg)	<pre>% REC.</pre>	DUP. % REC.	RPD	
11-DCE	ND	50	86	80	7	
Benzene	ND	50	108	105	3	
TCE	ND	50	110	104	6	
Toluene	ND	50	106	99	7	
Chlorobenzene	ND	50	110	105	5	

R4C 410745

CLIENT NAME: TOF ADDRESS: 11325 PHONE NO. 639. I PROJECT NAME: M SEND REPORT TO: S	Golden roc n Volley 744 FAX NO.		CHAIN (REQUI DA PAG		ORAN	NALYS 				C	K	Y	And 630 Torr Tel:	Y incolytica Maple Maple (213-6) (213-6)	il Lab Ave. Calif. 9 618-81	orate 90503 889	ories		
SAMPLER NAME/SIGNATUR				TURN AF	ROUND TI	ME				AN	ALYSE	ES RI	QUIRE	D					
John Re	amest	let he	com	NORMA RUSH			1 5	8010/601	8020/602 8080/608	8240/624	8270/625	CAM Metals							
SAMPLE NUMBER	SAMPLING DATE/TIME	PRESER- VATIVE	CONTAINER SIZE/TYPE	SAMPLE WATER	DESCR SOIL	OTHER	418.1 M8015	901	802(808(824(827(}							
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Relinguished by: (Signature	Relinguished by (Signature) Date: Received by (Signature)						ignature)						(Signat			Da	te:		
Company:	Time: 15-5-5	Company:	-y 16-		Compan	y:		Tim	ne:	Со	mpan	y :				Tim	1e:		

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.

RHC

	CLIENT			CHAIN (OF CU	STODY	REC	ORD										}
- 1	CLIENT NAME:																	
	ADDRESS: 11325	Golden rod	Ave	DA	TE: 7/	16/51	_				U	V.	_ (30 Map	ie Ave.		3	ł
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	PHONE NO. 839 ~ 1	744 FAX NO									-			ax: 213				ĺ
	PROJECT NAME: /// O	red nock																
	PEND HEADHL LO: 7 L	eve Mullige	: 1		TURN AF	OUND TIME					ANAL	YSES	REQU	IRED				
	SAMPLER NAME/SIGNATUR	9	10		NORMA													
	Joh, K	eones 1	A le	ean	RUSH			_ ഹ	8010/601	8020/602 8080/608	8240/624	CAM Metals						
Γ	SAMPLE	SAMPLING	PRESER-	CONTAINER	SAMPLE			418.1 M8015	010	3020	240,	AM						
	NUMBER	DATE/TIME	VATIVE	SIZE/TYPE	WATER	 	THER	4 5	<u>س</u>	, w w	T					г г		
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	B9-20' B9-25' B10-5'																	
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<u> </u>	B12-5'	<i>V</i>	J	V		V			V									
	COMMENTS:				- — ·													
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	Company: FREY		Company	Time //	e:	Company:			Tir	ne:	Com	pany:				Time:		

R4C 910745

OUTSIT					CHAIN	OF CU	STOD	Y REC	COR	D													
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ADDRES	s: 11325	Colden K	JA	ve		UEST F DATE: 7 PAGE 3	116/9		_~						/ _			ytical Iaple /		rator	ies		
	Fountain Valley PAG					PAGE	OF_3							7	V			nce, Ca 213-61					
	40. 839-17	2 <i>4/7</i> fax no <u>, ′</u>	····	···										_				213-61					
PROJEC	T NAME: //	rodrock		<u> </u>																			
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SAMPLER	R NAME/SIGNATY	RE /	//] 	/	NORM		/															
1 7.	1. K			\mathbb{Z}		RUSH	AL C			7	. 8	8	4	52	CAM Metals								
SAM	MPLE NE	comest s	1/4	PRESER-	CONTAINER	SAMPLE			=	M8015	20/66	809/0808	8240/624	.0/6	∑ ∑								İ
1	MBER	DATE/HME		VATIVE	SIZE/TYPE	WATER	SOIL	OTHER	418.1	₩ .	3 8	8	854	827	Š								
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1	In rea	~ 1116/91	16	// W////		7-1691												· 					
Company	EY	Time:	Comp			me:	Compan	y:			Time:		Co	ompa	iny:					Time	4		
		es: Sample will be stor	ed at CK		_/		mple/mont	h thereafter	r. Disp	osal c	f samp	le by	the L	abora	atory	will be	e char	rged a	<u>-</u> -)/sam	ple.		



C K Y incorporated Analytical Laboratories

Date: 07/22/91

910745

IDEA

11325 Goldenrod

Fountain Valley CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the laboratory report for samples received on 07/16/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

Method

No. of Analysis

EPA 8010

30 Soils

The results are summarized on seven pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

PROJECT:	IDEA Monadnock Soil			DATE RECEIN DATE ANALY	ZED: 07/18/	91	=====
SAMPLE ID: CONTROL NO.: 910745	Blank	B7-5' -1	B7-10' -2	B7-15' -3	B7-20' -4	B7-25' -5	DETEC
PARAMETERS (8010)	I	RESULT (ug/	kg)				LIMIT (ug/Kg
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	ND	5
Cls-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	5
1.1-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Chioroform	ND	ND	ND	ND	ND	ND	5
1,1,1—Trichloroethane	ND	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Trichloroethene	ND	ND	ND	ND	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
1,1,2—Trichloroethane	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	ND	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	ND ND	5
Chlorobenzene	ND	ND	ND	ND ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	· ND	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
% Surrogate Recovery:	100	88	88	97	84	78	

CLIENT: PROJECT: MATRIX TYPE:	IDEA Monadnock Soil		=======================================	DATE RECEIV	ZED: 07/18/9	1)1
SAMPLE ID: CONTROL NO.: 910745	B8-5' -6	B8-10' -7	B8-15' -8	B8-20' -9	B8-25' -10	DETEC.
PARAMETERS (8010)		RESULT (ug/k	(g)			LIMIT (ug/Kg)
Dichlorodifluoromethane	ND	ND	ND	ND	ND	20
Chioromethane	ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	5
1.1 – Dichloroethene	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	5
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	ND	5
Chloroform	ND ND	ND	ND ND	ND ND	ND	5
	ND	ND	ND	ND ND	ND ND	5 5
1,1,1—Trichloroethane	ND ND	ND ND	ND ND	ND ND	ND ND	5 5
Carbon Tetrachloride		ND		ND ND		5 5
1,2-Dichloroethane	ND	ND ND	ND ND	ND ND	ND ND	5 5
Trichloroethene	ND	ND	ND	ND ND		5 5
1,2-Dichloropropane	ND	ND	ND	ND	ND ND	5 5
Bromodichloromethane	ND	ND		ND	–	5 5
2-Chloroethylvinylether	ND		ND		ND	
Trans-1,3-Dichloropropene		ND	ND	ND	ND	5 5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	5
1,1,2,2—Tetrachloroethane	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	5
% Surrogate Recovery:	58	86	76	73	84	

CLIENT: PROJECT: MATRIX TYPE:	IDEA Monadnock Soil			DATE RECEIVED DATE ANALY	/ED: 07/16/9 ZED: 07/18/9	1)1
SAMPLE ID: CONTROL NO.: 910745	B9-5' -12	B9-10' -13	B9-15' -14	B9-20' -15	B9-25' -16	DETEC.
PARAMETERS (8010)		RESULT (ug/k	(g)			LIMIT (ug/Kg)
Dichlorodifluoromethane	ND	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	5
1.1 – Dichloroethene	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	5
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	5
1.1 – Dichloroethane	ND	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	5
1,1,1—Trichloroethane	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	ND	5
1.2-Dichloroethane	ND	ND	ND	ND	ND	5
Trichloroethene	ND	ND	ND	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	5
Tetrachioroethene	ND	ND	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	5
1,1,2,2—Tetrachloroethane	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	5
% Surrogate Recovery:	74	78	70	79	80	
					=======	=======

CLIENT: **IDEA** DATE RECEIVED: 07/16/91 PROJECT: Monadnock DATE ANALYZED: 07/17/91 MATRIX TYPE: Soil SAMPLE ID: **BLANK** B10-5' B10-10 B10-15' B10-20' B10-25' **CONTROL NO.: 910745** -18-19 -17 -20 -21 DETEC. LIMIT PARAMETERS (8010) RESULT (ug/kg) (ug/Kg) Dichlorodifluoromethane ND ND ND ND ND ND 20 Chloromethane ND ND ND ND ND ND 20 Vinyi Chloride ND ND ND ND ND ND 20 Bromomethane ND ND ND ND ND ND 20 Chloroethane ND ND ND ND ND ND 20 Trichlorofluoromethane ND ND ND ND ND ND 5 5 1.1 - Dichloroethene ND ND ND ND ND ND ND 5 Methylene Chloride 15 ND ND ND ND ND ND ND ND ND 5 Cis-1,2-Dichloroethene ND ND ND ND ND ND ND 5 1,1-Dichloroethane ND ND ND ND ND ND 5 Chloroform 1,1,1-Trichloroethane ND ND ND ND ND ND 5 ND 5 Carbon Tetrachloride ND ND ND ND ND 1.2-Dichloroethane ND ND ND ND ND ND 5 ND ND ND ND 5 Trichloroethene ND ND ND ND ND ND ND 5 1,2-Dichloropropane ND Bromodichloromethane ND ND ND ND ND ND 5 ND ND ND ND ND ND 5 2-Chloroethylvinylether ND ND ND ND 5 Trans-1,3-Dichloropropene ND ND ND ND ND ND ND 5 Cis-1,3-Dichloropropene ND 1,1,2-Trichloroethane ND ND ND ND ND ND 5 ND ND ND 5 Tetrachloroethene ND ND ND ND ND ND 5 ND ND ND Dibromochloromethane ND ND 5 ND ND ND ND Ethylene Dibromide 5 ND ND ND ND ND Chlorobenzene ND ND ND ND ND ND 5 ND Bromoform 1,1,2,2-Tetrachloroethane ND ND ND ND ND ND 5 ND ND ND ND ND ND 5 Chlorotoluene ND ND 5 M-Dichlorobenzene ND ND ND ND ND ND ND ND ND ND 5 P-Dichlorobenzene Benzylchloride ND ND ND ND ND ND 5 ND 5 ND ND ND O-Dichlorobenzene ND ND 102 117 110 122 109 106 % Surrogate Recovery:

EPA METHOD 8010 VOLATILE ORGANICS BY GC

CLIENT: PROJECT: MATRIX TYPE:	IDEA Monadnock Soil	: #=======		DATE RECEIVED DATE ANALY	/ED: 07/16/9 ZED: 07/17/9)1	-
SAMPLE ID: CONTROL NO.: 910745	B11-5' -22	B11-10' -23	B11-15' -24	B11-20' -25	B11-25' -26	B12-5' -27	DETEO
PARAMETERS (8010)		RESULT (ug/l	(g)				DETEC. LIMIT (ug/Kg)
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	ND	5
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	5
1.1-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	ND	5
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	5
1.2-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Trichloroethene	ND	ND	ND	ND	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	ND	5
2—Chloroethylvinylether	ND	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Tetrachioroethene	ND	ND	ND	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	5
Bromotorm	ND	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
Benzyichloride	ND	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
% Surrogate Recovery:	115	104	113	114	100	106	

EPA METHOD 8010 VOLATILE ORGANICS BY GC

CLIENT: PROJECT: MATRIX TYPE:	IDEA Monadnock Soil	:========		DATE RECEIV	• •
SAMPLE ID: CONTROL NO.: 910745	B12-10' -28	B12-15' -29	B12-20' -30	B12-25' -31	DETEC.
PARAMETERS (8010)		RESULT (ug/k	(g)		LIMIT (ug/Kg)
Dichlorodifluoromethane	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	5 -
Cis-1,2-Dichloroethene	ND	ND	ND	ND	5
1,1 - Dichloroethane	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	5
1,1,1 - Trichloroethane	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	5
Trichloroethene	ND	ND	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND `	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	11	ND	5
Dibromochloromethane	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	5 ,
P-Dichlorobenzene	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	5
% Surrogate Recovery:	70	104	106	74	

QUALITY CONTROL DATA

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910745

METHOD

EPA 8010

MATRIX:

Soil

SAMPLE ID:

Blank

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT <u>SPIKED</u> (ug/kg)	% REC.	DUP. <u>% REC.</u>	RPD	
TCE	ND	50	114	100	13	
1,1 DCE	ND	50	108	90	18	
Chl. Benzene	ND	50	112	113	1	

METHOD

EPA 8010

MATRIX:

Soil

SAMPLE ID: 910745-1

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT SPIKED (ug/kg)	% REC.	DUP. % REC.	RPD
TCE	ND	13	94	104	10
Chl. Benzene	ND	13	107	131	20

9/0768

	CLIENT TOE A ADDRESS: 1130 S FRONTE: PHONE NO. 839 - 17 PROJECT NAME: STE SEND REPORT TO: SAMPLER NAME/SIGNATURE	eve Mullige	Ave eng M	o not	RI	IUQU da	EST FO	DR ∂∂ DF_	100	Y REC NALYS NALYS		D				C AA	NALY	Y	REC	And 630 Torr Tel:	Maple Maple ance, 213- 213-	carpo ut Late e Ave. Calif. 618-8	90503 889	orte s		
	John Ke	aneste	1		en.	!	NORMA RUSH]	_	5	1801	8020/602	809/0808	8240/624	8270/625	CAM Metals	Ú							
	SAMPLE NUMBER	SAMPLING DATE/TIME	PRE VATI	SER-	CONTAIL SIZE/TYI		SAMPLE WATER	DES		PTION OTHER	418.1	M8015	8010/601	8020	88	8240	8270	Q A A	728							
1	R23-5'	7/22/91			919-01	. ,	WATER		ζ	01112																
2	823-10'	(1								1													
3	B23-15'	\											/													
4	823-25'																									
5	B23-25'													,												
6	B24-5'												1													
7	B24 -10'												V													
0	R24-15'												V													
9	B24-25'												V						-							
10	B24 -25'												V		-											
11	B25-5'													_												
12	828 - 10'-												V													
13	82E - 15'												V													
14	B25-30	4	- ₹		~				/				V						,							
	COMMENTS:								Ī		·							•	•	·		 				
	201	,															,	1								
	Relinguished by: (8) mature	7/30/1	Becaived by	(Sip	natura)	Day	2291	Relin	Quis	hed by (Si	ignatu	re)	Dat	e:		Re	celv	od b	y: (S こん	ignat LCC	nu)		Da	(0)	1,2	
	Company:	Time:	Company:	, J [2	У	Time	7	Com	pany	y:			Tin	ne:				any:	<>	/			Tim	ie: +	15	ţ~

Az 410768

SAMPLER NAME/SIGNATURE SAMPLE SAMPLING PRESER CONTAINER NAMPLE DESCRIPTION WATER SOIL OTHER \$25-25 7/22/9' None Size/14/90 X B26-25' \$26-25' \$26-25' \$26-25' \$26-25' \$26-25' \$26-25' \$26-25' \$27-25	PROJECT NAME: MC	Goldeniad	~ C-7	CHAIN (REQUI DA PA					D					Y	7	Analy 630 M Torrai Tel: : Fax: :	Y incor ytical 1aple A nce, Ca 213-61 213-61	Labori Ive. Ilif. 905 8-8889	atorie 503 9	:s	
SAMPLE SAMPLING PRESER CONTAINER NUMBER PATE/TIME VATIVE SIZE/TYPE WATER SOIL OTHER			ノ		TURN AR	OUND TH	ME					AN	ALYS	SES	REQ	UIRED)	_			
	John K	eemes 6	3/9	en	RUSH]	_	4		809/0)/624)/625	/ Metals	5						
\$25-25' 7/22/9' none Genturo X \$26-5' \$26-(8') \$26-25' \$26-25' \$26-25' \$27-5' \$27-5' \$27-15' \$27-25'		•						418	8 ¥ 8	802	808	824(827(Š	Ç.,						
B26-5' B26-18' B26-18' B26-28' B26-28' B27-5' B27-16' B27-28'	825-25			7					1	1		Ī	T		1					1	T
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	CLIENT TOE NAME: TOE ADDRESS: 11335 PHONE NO. 839- PROJECT NAME: M SEND REPORT TO: S	164 FAX NO	RE	QUEST FO	OR ANALYSI		GY An 630 Teel Fast	Y ir prat salytical Laboratories Maple Ave. rance, Calif. 90503 213-618-8889 213-618-0818
1)		TURN AF	ROUND TIME		' ANALYSES REQUIR	tED .
	John R	eomes //	h lear	NORMA RUSH		418.1 M8015 8019/60T 8020/802 8080/808	8240/624 8270/625 CAM Metals	
-	SAMPLE	SAMPLING	PRESER CONTAIN			418.1 MB015 8019/60 8020/60	8246 8270 CAN	
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	Company	Time: Co	mpany:	Time: 5:00	Company:	Time:	Company:	Time:

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.

: --



C K Y incorporated Analytical Laboratories

Date: 08/02/91

910768

IDEA

11325 Goldenrod Avenue Fountain Valley, CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the laboratory report for samples received on 07/22/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

Method

No. of Analysis

EPA 8260

30 Soils

The results are summarized on thirty two pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B23-5' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-1 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	• •
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		

ND = Not Detected

1,2 Dichloroethane-d4	92
Toluene-d8	72
Bromofluorobenzene	80

CLIENT: IDEA DATE REC'D: 07/22/91

PROJECT: Monadnock DATE EXTRACTED: N/A

SAMPLE ID: B23-10' DATE ANALYZED: 07/23/91

CONTROL NO: 910768-2 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		
		ND = Not Detected	
§ Surrogate Recove:	ry		
1,2-Dichloroethane Toluene-d8	66 106		
Bromofluorobenzene	114		

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A

SAMPLE ID: B23-15'

DATE ANALYZED: 07/23/91

CONTROL NO: 910768-3 MATRIX : Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene Bromobenzene	ND (5)
1,1-Dichloroethane	ND (5)		ND (10) ND (5)
cis 1,2-Dichloroethene	ND (5) ND (5)	1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane	ND (5) ND (5)
2,2-Dichloropropane Bromochloromethane	ND (5)	n-Propylbenzene	ND (3)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	11 (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	, ,
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	14 (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		, ,
		ND = Not Detected	

1,2-Dichloroethane-d4	94
Toluene-d8	96
Bromofluorobenzene	94

CLIENT: IDEA DATE REC'D: 07/22/91

PROJECT: Monadnock DATE EXTRACTED: N/A SAMPLE ID: B23-20' DATE ANALYZED: 07/2

SAMPLE ID: B23-20' **DATE ANALYZED:** 07/23/91 **CONTROL NO:** 910768-4 **MATRIX:** Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2-Dichloroethane Trichloroethene 1,2-Dichloropropane Dibromomethane Bromodichloromethane cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane	ND (10) ND (20) ND (20) ND (10) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropan 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (5) ND (10) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (5) ND (5) ND (5)
1,2-Dibromoethane <u> </u>	ND (5)	ND = Not Detected	
1,2-Dichlorethane-d4	100		

Toluene-d8

Bromofluorobenzene

74

120

IDEA DATE REC'D: CLIENT: 07/22/91 DATE EXTRACTED: N/A PROJECT: Monadnock B23-25' SAMPLE ID: DATE ANALYZED: 07/23/91 CONTROL NO: 910768-5 MATRIX: RESULTS RESULTS (ug/kg) COMPOUND COMPOUND (ug/kg) Vinyl Chloride ND (10) Chlorobenzene ND (5) ND (20) 1,1,1,2-Tetrachloroethane ND (5) Bromomethane Chloroethane ND (20) Ethyl Benzene ND (5) Xvlenes Trifluorochloromethane ND (10) ND (5) 1,1-Dichloroethene ND (5) Styrene ND (5) Methylene Chloride ND (20) Bromoform ND (10) Isopropyl Benzene t-1,2-Dichloroethene ND (5) ND (5) 1,1-Dichloroethane ND (5) Bromobenzene ND (10) 1,1,2,2 -Tetrachloroethane cis 1,2-Dichloroethene ND (5) ND (5) 2,2-Dichloropropane ND (5) 1,2,3-Trichloropropane ND (5) n-Propylbenzene ND (10) Bromochloromethane ND (5) Chloroform ND (5) 2-Chlorotoluene ND (10) 4-Chlorotoluene 1,1,1-Trichloroethane ND (5) ND (10) Carbon Tetrachloride ND (5) 1,3,5-Trimethylbenzene ND (5) ND (5) t-butylbenzene ND (5) Benzene 1,2 -Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) 1,3-Dichlorobenzene ND (5) ND (5) Trichloroethene 1,2 -Dichloropropane ND (5) sec-Butylbenzene ND (10) 1,4-Dichlorobenzene Dibromomethane ND (5) ND (5) Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) cis 1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) n-Butylbenzene ND (10) 1,2 Dibromo-3-chloropropane ND (20) t-1,3-Dichloropropane ND (5) 1,2,4-Trichlorobenzene ND (20) 1,1,2-Trichloroethane ND (5) ND (5) Naphthalene ND (20) Tetrachloroethene 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) 1,2,3-Trichlorobenzene Dibromochloromethane ND (5) ND (10) 1,2-Dibromoethane ND (5) = Not Detected ND

1,2 Dichloroethane-d4	90
Toluene-d8	88
Bromofluorobenzene	88

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B24-5' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-6 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		
9. Green and a December		ND = Not Detected	
§ Surrogate Recove:	ry		
1,2 Dichloroethane	90		

1,2 Dichloroethane	90
Toluene-d8	88
Bromofluorobenzene	86

CLIENT: IDEA

PROJECT: Monadnock

SAMPLE ID: B24-10'

CONTROL NO: 910768-7

MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		

ND = Not Detected

1,2 Dichloroethane-d4	92
Toluene-d8	86
Bromofluorobenzene	88

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B24-15' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-8 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		•

ND = Not Detected

1,2 Dichloroethane-d4	92
Toluene-d8	84
Bromofluorobenzene	88

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B24-20' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-9 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride	ND (10)	Chlorobenzene	ND	(5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND	(5)
Chloroethane	ND (20)	Ethyl Benzene	ND	(5)
Trifluorochloromethane	ND (10)	Xylenes	ND	(5)
1,1-Dichloroethene	ND (5)	Styrene	ND	(5)
Methylene Chloride	ND (20)	Bromoform	ND	(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND	(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND	(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND	(5)
Benzene	ND (5)	t-butylbenzene	ND	(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND	(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND	(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND	(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND	(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND	(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene	ND	(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND	(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND	(20)
Tetrachloroethene	ND (5)	Naphthalene	ND	(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			

ND = Not Detected

1,2 Dichloroethane-d4	92
Toluene-d8	86
Bromofluorobenzene	88

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B24-25' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-10 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloropropane Trichloroethene 1,2 -Dichloropropane Dibromomethane Bromodichloromethane cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane	ND (10) ND (20) ND (20) ND (20) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropan 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	(5) (5) (5) (5) (5) (10) (10) (10) (10) (10) (10) (10) (10
1,2-Dibromoethane	ND (5)			

% Surrogate Recovery

1,2 Dichloroethane-d4	94
Toluene-d8	84
Bromofluorobenzene	86

ND = Not Detected

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B25-5' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-11 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloropropane Trichloroethene 1,2 -Dichloropropane Dibromomethane Cris 1,3-Dichloropropane Toluene t-1,3-Dichloropropane		Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropane	\(\mathbb{Ug/kg}\) \(\mathbb{ND}\) (5) \(\mathbb{ND}\) (5) \(\mathbb{ND}\) (5) \(\mathbb{ND}\) (5) \(\mathbb{ND}\) (5) \(\mathbb{ND}\) (5) \(\mathbb{ND}\) (10) \(\mathbb{ND}\) (5)
1,1,2-Trichloroethane	ND (5)	1,2 Dibromo-3-chioropropand 1,2,4-Trichlorobenzene	ND (20)
Toluene	ND (5)	n-Butylbenzene	ND (10)
Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane	ND (5) ND (5) ND (5) ND (5)	Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (20) ND (20) ND (10)

ND = Not Detected

1,2 Dichloroethane-d4	94
Toluene-d8	86
Bromofluorobenzene	88

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B25-10 DATE ANALYZED: 07/23/91
CONTROL NO: 910768-12 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloroethane Trichloroethene 1,2 -Dichloropropane Dibromomethane Bromodichloromethane cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane Tetrachloropropane Dibromochloromethane	ND (10) ND (20) ND (20) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropan 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (10) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5)
<pre>% Surrogate Recover</pre>	, ,	ND = Not Detected	

1,2 Dichloroethane-d4	92
Toluene-d8	84
Bromofluorobenzene	88

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B25-15 DATE ANALYZED: 07/23/91
CONTROL NO: 910768-13 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride	ND (10)	Chlorobenzene	ND	(5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane		(5)
Chloroethane	ND (20)	Ethyl Benzene		(5)
Trifluorochloromethane	ND (10)	Xylenes		(5)
1,1-Dichloroethene	ND (5)	Styrene		(5)
Methylene Chloride	ND (20)	Bromoform		(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene		(5)
1,1-Dichloroethane	ND (5)	Bromobenzene		(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND	(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND	(5)
Benzene	ND (5)	t-butylbenzene	ND	(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND	(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND	(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND	(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND	(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND	(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene	ND	(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND	(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND	(20)
Tetrachloroethene	ND (5)	Naphthalene	ND	(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			
& Cummanata Da		ND = Not Detected		
§ Surrogate Recove	ΤΛ			

1,2 Dichloroethane-d4	92
Toluene-d8	86
Bromofluorobenzene	89

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B25-20' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-14 MATRIX: Soil

<u>COMPOUND</u>	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
· · · · · · · · · · · · · · · · · · ·			
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	, ,
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	10 (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	16 (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		
		NO Not not al	
§ Surrogate Recove	ry	ND = Not Detected	
1,2 Dichloroethane-d4	115		
Toluene-d8	100		
Bromofluorobenzene	94		

DATE REC'D: IDEA CLIENT: 07/22/91 PROJECT: Monadnock DATE EXTRACTED: N/A SAMPLE ID: B25-25' DATE ANALYZED: 07/23/91

CONTROL NO: 910768-15 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride	ND (10)	Chlorobenzene		(5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND	(5)
Chloroethane	ND (20)	Ethyl Benzene	ND	(5)
Trifluorochloromethane	ND (10)	Xylenes	ИD	(5)
1,1-Dichloroethene	ND (5)	Styrene		(5)
Methylene Chloride	ND (20)	Bromoform	ND	(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND	(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND	(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND	(5)
Benzene	ND (5)	t-butylbenzene		(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene		(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene		(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene		(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ИD	(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND	(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene	ND	(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND	(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND	(20)
Tetrachloroethene	ND (5)	Naphthalene	ND	(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			
		ND = Not Detected		
§ Surrogate Recove	ry			
1,2 Dichloroethane-d4	106			
Toluene-d8	88			

1,2 Dichloroethane-d4	106
Toluene-d8	88
Bromofluorobenzene	102

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B26-5' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-16 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		
		ND = Not Detected	
% Surrogate Recover	rv		

1,2 Dichloroethane-d4	102
Toluene-d8	136
Bromofluorobenzene	98

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B26-10 DATE ANALYZED: 07/23/91
CONTROL NO: 910768-17 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU	
Vinyl Chloride	ND (10)	Chlorobenzene	ND	(5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND	(5)
Chloroethane	ND (20)	Ethyl Benzene	ND	(5)
Trifluorochloromethane	ND (10)	Xylenes	ИD	(5)
1,1-Dichloroethene	ND (5)	Styrene	ND	(5)
Methylene Chloride	ND (20)	Bromoform	ND	(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ИD	(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane		(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND	(5)
Benzene	ND (5)	t-butylbenzene	ND	(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND	(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND	(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND	(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ИD	(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND	(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene	ND	(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND	(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND	(20)
Tetrachloroethene	ND (5)	Naphthalene	ND	(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			

ND = Not Detected

1,2 Dichloroethane-d4	100
Toluene-d8	110
Bromofluorobenzene	98

 CLIENT:
 IDEA
 DATE REC'D:
 07/22/91

 PROJECT:
 Monadnock
 DATE EXTRACTED:
 N/A

 SAMPLE ID:
 B26-15'
 DATE ANALYZED:
 07/23/91

 CONTROL NO:
 910768-18
 MATRIX:
 Soil

COMPOUND	RESUL (ug/kg		RESU ug/k	
COIL COILD	1 49/ 119	T COM COMP	<u>ug/ n</u>	<u> </u>
Vinyl Chloride	ND (10) Chlorobenzene	ND	(5)
Bromomethane	ND (20) 1,1,1,2-Tetrachloroethane		(5)
Chloroethane	ND (20) Ethyl Benzene	ND	(5)
Trifluorochloromethane	ND (10) Xylenes	ND	(5)
1,1-Dichloroethene	ND (5)	Styrene	ND	(5)
Methylene Chloride	ND (20) Bromoform	ND	(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND	(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND	(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ИD	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND	(5)
Benzene	ND (5)	t-butylbenzene	ND	(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND	(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND	(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND	(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND	(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ИD	(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene		(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropane		(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND	(20)
Tetrachloroethene	ND (5)	Naphthalene	ND	(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			

% Surrogate Recovery

1,2 Dichloroethane-d4	100
Toluene-d8	72
Bromofluorobenzene	104

ND = Not Detected

CLIENT: IDEA DATE REC'D: 07/22/91

PROJECT: Monadnock DATE EXTRACTED: N/A

SAMPLE ID: B26-20' **DATE ANALYZED:** 07/23/91

CONTROL NO: 910768-19 MATRIX : Soil

	RESULTS		RESULI	rs
COMPOUND	(ug/kg)	COMPOUND	(ug/kg)	L
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5	: \
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5	•
Chloroethane	ND (20)	Ethyl Benzene	ND (5	•
Trifluorochloromethane	ND (10)	Xylenes	ND (5	•
1,1-Dichloroethene	ND (5)	Styrene	ND (5	•
Methylene Chloride	ND (20)	Bromoform		.0)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5	
1,1-Dichloroethane	ND (5)	Bromobenzene	•	.0)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	•	
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5	•
Bromochloromethane	ND (5)	n-Propylbenzene	•	.0)
Chloroform	ND (5)	2-Chlorotoluene	•	.0)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	•	0)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5	•
Benzene	ND (5)	t-butylbenzene	ND (5	•
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5	5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5	5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (1	LO)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5	5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (1	LO)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5	5)
Toluene	ND (5)	n-Butylbenzene	ND (1	LO)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (2	20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (2	20)
Tetrachloroethene	ND (5)	Naphthalene	ND (2	20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (2	20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (1	LO)
1,2-Dibromoethane	ND (5)			

ND = Not Detected

1,2 Dichloroethane-d4	106
Toluene-d8	92
Bromofluorobenzene	104

DATE REC'D: 07/22/91 IDEA CLIENT: Monadnock

PROJECT: DATE EXTRACTED: N/A SAMPLE ID: B26-25' **DATE ANALYZED:** 07/23/91

CONTROL NO: 910768-20 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride	ND (10)	Chlorobenzene	ND	(5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND	(5)
Chloroethane	ND (20)	Ethyl Benzene	ND	(5)
Trifluorochloromethane	ND (10)	Xylenes	ND	(5)
1,1-Dichloroethene	ND (5)	Styrene	ND	(5)
Methylene Chloride	ND (20)	Bromoform	ND	(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND	(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND	(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene		(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene		(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene		(5)
Benzene	ND (5)	t-butylbenzene	ND	(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene		(5)
Trichloroethene	N D (5)	1,3-Dichlorobenzene		(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene		(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene		(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene		(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene		(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND	(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND	(20)
Tetrachloroethene	ND (5)	Naphthalene	ND	(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			

ND = Not Detected

1,2 Dichloroethane-d4	108
Toluene-d8	92
Bromofluorobenzene	102

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B27-5' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-21 MATRIX: Soil

	RESULTS		RESULTS
COMPOUND	(ug/kg)	COMPOUND	(ug/kg)
Wines Chlowide	ND (10)	Ohlanahanaana	35D (5)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)	1,2,5 IIIonIoIosonaone	112 (10)
•	` '		

% Surrogate Recovery

1,2 Dichloroethane-d4	98
Toluene-d8	90
Bromofluorobenzene	102

ND = Not Detected

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B27-10' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-22 MATRIX: Soil

		COMPOUND	(ug/k	<u>g)</u>
Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride	ND (10) ND (20) ND (20) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND N	(5) (5) (5) (5) (5) (10) (5) (10) (10) (10) (5)
Benzene N	ND (5) ND (5) ND (5)	t-butylbenzene	ND	(5) (5) (5)
Trichloroethene N	ND (5) ND (5) ND (5)	1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene	ND	(5) (5) (10)
Dibromomethane N	ND (5) ND (5)	1,4-Dichlorobenzene p-Isopropyl toluene		(5) (10)
Toluene	ND (5) ND (5)	1,2-Dichlorobenzene n-Butylbenzene	ND ND	(5) (10)
1,1,2-Trichloroethane N	ND (5) ND (5) ND (5)	1,2 Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Naphthalene	e ND ND ND	(20) (20) (20)
1,3-Dichloropropane N Dibromochloromethane N	ND (5) ND (5) ND (5)	Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND ND	(20) (10)

ND = Not Detected

1,2 Dichloroethane-d4	94
Toluene-d8	94
Bromofluorobenzene	118

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B27-15' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-23 MATRIX: Soil

	RESULTS		RESULTS
COMPOUND	(ug/kg)	COMPOUND	(ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (3)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	, ,
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		

ND = Not Detected

1,2 Dichloroethane-d4	90
Toluene-d8	108
Bromofluorobenzene	110

 CLIENT:
 IDEA
 DATE REC'D:
 07/22/91

 PROJECT:
 Monadnock
 DATE EXTRACTED:
 N/A

 SAMPLE ID:
 B27-20
 DATE ANALYZED:
 07/23/91

 CONTROL NO:
 910768-24
 MATRIX:
 Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		
		ND = Not Detected	

1,2 Dichloroethane-d4	96
Toluene-d8	106
Bromofluorobenzene	110

IDEA DATE REC'D: CLIENT: 07/22/91 PROJECT: Monadnock DATE EXTRACTED: N/A **DATE ANALYZED:** 07/23/91 SAMPLE ID: B27-25' CONTROL NO: 910768-25 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride	ND (10)	Chlorobenzene	ND	(5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane		(5)
Chloroethane	ND (20)	Ethyl Benzene		(5)
Trifluorochloromethane	ND (10)	Xylenes		(5)
1,1-Dichloroethene	ND (5)	Styrene		(5)
Methylene Chloride	ND (20)	Bromoform		(1Ó)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene		(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND	(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene		(5)
Benzene	ND (5)	t-butylbenzene		(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene		(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene		(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene		(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene		(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene		(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene		(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan		(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene		(20)
Tetrachloroethene	ND (5)	Naphthalene		(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			

§ Surrogate Recovery

1,2 Dichloroethene-d4	88
Toluene-d8	96
Bromofluorobenzene	114

ND = Not Detected

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B22-5' DATE ANALYZED: 07/23/91
CONTROL NO: 910768-26 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		

ND = Not Detected

1,2 Dichloroethane-d4	110
Toluene-d8	108
Bromofluorobenzene	120

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B22-10 DATE ANALYZED: 07/23/91
CONTROL NO: 910768-27 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		

% Surrogate Recovery

1,2 Dichloroethane-d4	104
Toluene-d8	82
Bromofluorobenzene	82

ND = Not Detected

CLIENT: IDEA DATE REC'D: 07/22/91

PROJECT: Monadnock DATE EXTRACTED: N/A

SAMPLE ID: B22-15 **DATE ANALYZED:** 07/23/91

CONTROL NO: 910768-28 MATRIX : Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloroethane Trichloroethene 1,2 -Dichloropropane Dibromomethane Bromodichloromethane cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane	ND (10) ND (20) ND (20) ND (10) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropan 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (5) ND (10) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (10)
<pre>% Surrogate Recove:</pre>		ND = Not Detected	
1,2 Dichloroethane-d4 Toluene-d8 Bromofluorobenzene	100 128 102		

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A

SAMPLE ID: B22-20' DATE ANALYZED: 07/23/91

CONTROL NO: 910768-29 MATRIX : Scil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ทD (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		
		MD Made Data wheel	

ND = Not Detected

1,2 Dichloroethane-d4	98
Toluene-d8	100
Bromofluorobenzene	101

CITENT: IDEA DATE DECID: 07/22/01

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B22-25' DATE ANALYZED: 07/23/91

CONTROL NO: 910768-30 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethene 2,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloroethene 1,2 -Dichloropropane Dibromomethane Trichloroethene 1,2 -Dichloropropane Dibromomethane t-1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane	ND (10) ND (20) ND (20) ND (20) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2-Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropan 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5)
Dibromochloromethane 1,2-Dibromoethane	ND (5) ND (5)	1,2,3-Trichlorobenzene	ND (10)

ND = Not Detected

% Surrogate Recovery

1,2 Dichloroethane-d4	114
Toluene-d8	96
Bromofluorobenzene	94

CLIENT: IDEA DATE REC'D: 07/22/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: Method Blank DATE ANALYZED: 07/23/91
CONTROL NO: 910768 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloroethane Trichloroethene 1,2 -Dichloropropane Dibromomethane Bromodichloromethane cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane	ND (10) ND (20) ND (20) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropan 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (10) ND (5) ND (10)
Dibromochloromethane 1,2-Dibromoethane	ND (5) ND (5)	1,2,3-Trichlorobenzene	ND (10)

% Surrogate Recovery

1,2 Dichloroethane -d	l	1	92
Toluene-d8		-	72
Bromofluorobenzene			80

ND = Not Detected

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910768

METHOD

EPA 8260

MATRIX:

Soil

SAMPLE ID: 910768-16

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT SPIKED (ug/kg)	% REC.	DUP. % REC.	RPD	
Benzene	ND	50	94	96	2	
TCE	ND	50	80	92	14	
Toluene	ND	50	60	56	7	
Chl. Benzene	ND	50	98	94	4	

METHOD

EPA 8260

MATRIX: Soil

SAMPLE ID: 910768-30

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT <u>SPIKED</u> (ug/kg)	% REC.	DUP. % REC.	RPD
Benzene	ND	50	80	92	14
TCE	ND	50	72	82	13
Toluene	ND	50	68	76	11
Ch. Benzene	ND	50	84	108	25

910772

Cn

CLIENT - 0 CA			CHAIN (_		RD										
NAME: L()EH			REQU:	EST FA	OR, AN	IALYS	IS						_		Y incor			
ADDRESS: 11325 FOUNT & PHONE NO (24) 839 1	Goldenad	Ave	DA	EST FOR ANALYSIS TE: 7/23/91 GE 1 OF 3						Analytical Laboratories 630 Maple Ave. Torrance, Calif. 90503								
. Founte	in Velley		PA	GE(DF_3_								V		ance, Cal 213-618		13	
PHONE NO(34/839 1	7 <u>44</u> FAX NO		-									_		Fax:	213-618	-0818		
PROJECT NAME: Mo	to a Mill-		•															
SEND REPORT TO:	LEVE MOTIO	580)	TURN AR	OUND TI	ME	T				AN	ALYS	ES RE	OUIRE	D D			
SAMPLER NAME/SIGNATU	1 //			NORMA	ıL _	7		~	-				s s					
John Ream		Lear	nam	RUSH				M8015	/801 101 101	809/0808 8080/608	8240/624	/625	CAM Metals	9				
SAMPLE	SAMPLING	PRESER-	CONTAINER	SAMPLE			418.1	V801	5 5	8 8	3240	3270	SAM S	, ,				
NUMBER	DATE/TIME	VATIVE	SIZE/TYPE	WATER	SOIL	OTHER				7	1	$\overline{}$		$\overline{}$			T	
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201																		
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ADDRESS: 11325 Fountain	Goldenrod	Aue	DA	TE: 7	23/41					U	V.	_	630 M	Iaple Ave	·.		
tountai	n Velley		PA	GE_&	of_3_						M			nce, Calif 213-618-			
PHONE NO. (1)41 139	- []44 FAX NO												Fax: 2	213-618-)818		
PROJECT NAME: MoseND REPORT TO: St	A Adnock																
1		700		TURN A	ROUND TI	ME				ANAL	YSES	REQ	HRED	3			
SAMPLER NAME/SIGNATUR	1 /	10//		NORM	AL.	٦					S	f	Ū	£ . 3			
John Rear	nes for	Kea	m	RUSH			_	M8015 8010/601	8020/602	8240/624	CAM Metals	9	4	Cadmium			
SAMPLE NUMBER	ZSAMPLING.	PRESER-		SAMPLE			418.1	M8015 8010/60	90 90 90 90 90 90	3240	(AM	4	<u>`</u>	35			
	DATE/TIME	VATIVE	SIZE/TYPE	WATER		OTHER			T		7	.	Ť		ТТ	\neg	
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B33-20'														V)			
B33-25'														V			
834-5'											_		1	/			
B34-10' B34-15'													4	V			\sqcup
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	PHONE NO. CON 829 PROJECT NAME: Ma	1744 FAX	NO						DY REC NALYS)			K	Y	C K Y inc Analytica 630 Maple Torrance. (Tel: 213-6 Fax: 213-6	l Labora Ave. Calif. 9056 518-8889	tories	
	SEND REPORT TO: ST		<u>nlligan</u>		7	ſ	TURN AR	OUND	TIME	Ī.			AN	NALYSE	S REC	QUIRED	-		
	John Rea	mest		Kea			NORMA RUSH				MB015 8010/601	8020/602	8240/624	8270/625	CAM Metals				
	SAMPLE NUMBER	SAMPLIN DATE/TIN		PRESE	,		SAMPLE WATER	DESC	RIPTION OTHER	418.1	MB015 8010/60	8020	824(8270	\$ 5	<u> </u>			
74	R.35-5	7/23/9		 	Grass	. /	WATEN	K	OTTACH				Ì		TŽ	1			
30	B35-10'	/\ <u>\\</u>	1	1	5/423	1056		1	†						1	1			
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37)	R35 -25'								<u> </u>						V	1			
34	B36 - 5'														V	1			
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Į	-KEY			<u></u>		5:0	10	Scr	1 410		6	: 2-g		(k.	7			6:2	٥.

Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.



CKY incorporated Analytical Laboratories

Date: 08/06/90

910772

IDEA

11325 Goldenrod

Fountain Valley, CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the laboratory report for samples received on 07/24/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

<u>Method</u>	<u>No. of Analysi</u>
EPA 8260	17 Soils
Cyanide	20 Soils
Cadmium	5 Soils
Chromium	5 Soils
EPA 418.1	2 Soils

The results are summarized on twenty-seven pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

DATE REC'D: 07/23/91 CLIENT: IDEA PROJECT: Monadnock SAMPLE ID: B28-5' DATE EXTRACTED: N/A **DATE ANALYZED:** 07/25/91

CONTROL NO: 910772-1 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		, ,

ND = Not Detected

% Surrogate Recovery

1,2 Dicholoroethane-d4	96
Toluene-d8	92
Bromofluorobenzene	92

DATE REC'D: 07/23/91 CLIENT: IDEA PROJECT: Monadnock DATE EXTRACTED: N/A SAMPLE ID: B28-10' DATE ANALYZED: 07/25/91

CONTROL NO: 910772-2 MATRIX : Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESUI (ug/ko	
Vinyl Chloride	ND (10)	Chlorobenzene	ND ((5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	•	(5 j
Chloroethane	ND (20)	Ethyl Benzene	•	5)
Trifluorochloromethane	ND (10)	Xylenes	•	5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND ((10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND ((5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND ((5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND ((5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND ((10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND ((10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND ((5)
Toluene	ND (5)	n-Butylbenzene	ND ((10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND ((20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND ((20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND ((20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND ((10)
1,2-Dibromoethane	ND (5)			
<pre> § Surrogate Recove:</pre>	<u>ry</u>	ND = Not Detected		

1,2 Dicholoroethane-d4	99
Toluene-d8	92
Bromofluorobenzene	94

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B28-15' DATE ANALYZED: 07/25/91
CONTROL NO: 910772-3 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	, ,
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	•
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		
		ND = Not Detected	
§ Surrogate Recove	ry		
1,2 Dicholoroethane-d4	97		
Toluene-d8	95		

Bromofluorobenzene

94

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B28-20' DATE ANALYZED: 07/25/91
CONTROL NO: 910772-4 MATRIX: Soil

	RESULTS		RESULTS
COMPOUND	(ug/kg)	COMPOUND	(ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)	, . ,	- (- ,
-,-	,		
		ND = Not Detected	
§ Surrogate Recover	ry		
1,2 Dicholoroethane-d4	99		
Toluene-d8	92		

Bromofluorobenzene

94

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B28-25' DATE ANALYZED: 07/25/91

CONTROL NO: 910772-5 MATRIX: Soil

RESULTS RESULTS COMPOUND COMPOUND (uq/kq) (uq/kq) Vinyl Chloride ND (10) Chlorobenzene ND (5) 1,1,1,2-Tetrachloroethane Bromomethane ND (20) ND (5) Chloroethane ND (20) Ethyl Benzene ND (5) Trifluorochloromethane ND (10) Xylenes ND (5) 1,1-Dichloroethene ND (5) Styrene ND (5) Methylene Chloride ND (20) Bromoform ND (10) ND (5) t-1,2-Dichloroethene Isopropyl Benzene ND (5) ND (5) Bromobenzene ND (10) 1,1-Dichloroethane ND (5) 1,1,2,2 -Tetrachloroethane ND (5) cis 1,2-Dichloroethene 1,2,3-Trichloropropane 2,2-Dichloropropane ND (5) ND (5) Bromochloromethane ND (5) n-Propylbenzene ND (10) ND (5) 2-Chlorotoluene ND (10) Chloroform 1,1,1-Trichloroethane ND (5) 4-Chlorotoluene ND (10) ND (5) Carbon Tetrachloride ND (5) 1,3,5-Trimethylbenzene Benzene ND (5) t-butylbenzene ND (5) 1,2 -Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) ND (5) Trichloroethene 1,3-Dichlorobenzene ND (5) 1,2 -Dichloropropane ND (5) sec-Butylbenzene ND (10) Dibromomethane ND (5) 1,4-Dichlorobenzene ND (5) Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) cis 1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (5) ND (5) n-Butylbenzene ND (10) Toluene t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) ND (5) 1,2,4-Trichlorobenzene ND (20) 1,1,2-Trichloroethane Tetrachloroethene ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10)

ND = Not Detected

% Surrogate Recovery

1,2-Dibromoethane

1,2 Dicholoroethane-d4	96
Toluene-d8	92
Bromofluorobenzene	94

ND (5)

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B29-5' DATE ANALYZED: 07/25/91
CONTROL NO: 910772-7 MATRIX: Soil

	RESULTS		RESULTS
COMPOUND	(ug/kg)	COMPOUND	(ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)	- ,,	` ,
•	` ,		
		ND = Not Detected	
§ Surrogate Recove:	ry		
1,2 Dicholoroethane-d4	98		
Toluene-d8	92		

Bromofluorobenzene

92

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A

SAMPLE ID: B29-10' **CONTROL NO:** 910772-8 **DATE ANALYZED:** 07/25/91 **MATRIX:** Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride	ND (10)	Chlorobenzene	ND	(5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND	(5)
Chloroethane	ND (20)	Ethyl Benzene	ND	(5)
Trifluorochloromethane	ND (10)	Xylenes	ND	(5)
1,1-Dichloroethene	ND (5)	Styrene	ND	(5)
Methylene Chloride	ND (20)	Bromoform	ND	(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND	(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	ND	(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND	(5)
Benzene	ND (5)	t-butylbenzene	ND	(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND	(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND	(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND	(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ИD	(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND	(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene	ND	(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan		(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND	(20)
Tetrachloroethene	ND (5)	Naphthalene	ND	(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			
		ND = Not Detected		

% Surrogate Recovery

1,2 Dicholoroethane-d4	97
Toluene-d8	90
Bromofluorobenzene	96

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B29-15' DATE ANALYZED: 07/25/91
CONTROL NO: 910772-9 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloroethane Trichloroethene 1,2 -Dichloropropane Dibromomethane Bromodichloromethane cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane	ND (10) ND (20) ND (20) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (20) ND (20) ND (20) ND (10)
§ Surrogate Recove:	ry	ND = Not Detected	
1,2 Dicholoroethane-d4 Toluene-d8 Bromofluorobenzene	96 91 94		

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B29-20' DATE ANALYZED: 07/25/91
CONTROL NO: 910772-10 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloropropane Trichloroethene 1,2 -Dichloropropane Dibromomethane Cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane	ND (10) ND (20) ND (20) ND (10) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (10) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5)
<pre>% Surrogate Recove</pre>	ry	ND = Not Detected	

1,2 Dicholoroethane-d4	98
Toluene-d8	90
Bromofluorobenzene	94

CLIENT: IDEA DATE REC'D: 07/23/91

PROJECT: Monadnock DATE EXTRACTED: N/A SAMPLE ID: B29-25' DATE ANALYZED: 07/25/91

CONTROL NO: 910772-11 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloropropane Trichloroethene 1,2 -Dichloropropane Dibromomethane Erichloromethane Trichloroethene 1,2 -Dichloropropane Dibromomethane tis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane	ND (10) ND (20) ND (20) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (10) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (20) ND (20) ND (20) ND (10)
<pre>% Surrogate Recove 1,2 Dicholoroethane-d4 Toluene-d8 Bromofluorobenzene</pre>	<u>ry</u> 94 91 98	ND = Not Detected	

DATE REC'D: 07/23/91 CLIENT: IDEA PROJECT: Monadnock DATE EXTRACTED: N/A SAMPLE ID: B30-5' **DATE ANALYZED:** 07/25/91

CONTROL NO: 910772-12 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride Bromomethane	ND (10) ND (20)	Chlorobenzene 1,1,1,2-Tetrachloroethane	ND ND	(5) (5)
Chloroethane	ND (20)	Ethyl Benzene	ND	(5)
Trifluorochloromethane	ND (10)	Xylenes	ND	(5)
1,1-Dichloroethene	ND (5)	Styrene	ND	(5)
Methylene Chloride	ND (20)	Bromoform	ND	(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND	(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane		(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene		(5)
Benzene	ND (5)	t-butylbenzene	ND	(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND	(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND	(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND	(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND	(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND	(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene	ND	(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan		(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND ND	(20)
Tetrachloroethene	ND (5)	Naphthalene		(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene		(20)
Dibromochloromethane 1,2-Dibromoethane	ND (5) ND (5)	1,2,3-Trichlorobenzene	ND	(10)

ND = Not Detected

% Surrogate Recovery

1,2 Dicholoroethane-d4	96
Toluene-d8	90
Bromofluorobenzene	96

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B30-10' DATE ANALYZED: 07/25/91

CONTROL NO: 910772-13 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloropropane Trichloroethene 1,2 -Dichloropropane Dibromomethane Cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane 1,2-Dibromoethane	ND (10) ND (20) ND (20) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (20) ND (20) ND (20) ND (20) ND (20) ND (20)
<pre>% Surrogate Recove</pre>		ND = Not Detected	
1,2 Dicholoroethane-d4 Toluene-d8 Bromofluorobenzene	94 90 94		

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B30-15' DATE ANALYZED: 07/25/91
CONTROL NO: 910772-14 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloroethane Trichloroethene 1,2 -Dichloropropane Dibromomethane Bromodichloromethane cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane Tetrachloroethene 1,3-Dichloropropane Dibromochloromethane Tetrachloroethene	ND (10) ND (20) ND (20) ND (10) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene 1,2,3-Trichlorobenzene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (20) ND (20) ND (20) ND (20) ND (10)
Surrogate Recover	· <u>·</u>	ND = Not Detected	
1,2 Dicholoroethane-d4 Toluene-d8 Bromofluorobenzene	95 91 93	•	

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B30-20' DATE ANALYZED: 07/25/91

CONTROL NO: 910772-15 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride	ND (10)	Chlorobenzene	ND (5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND (5)
Chloroethane	ND (20)	Ethyl Benzene	ND (5)
Trifluorochloromethane	ND (10)	Xylenes	ND (5)
1,1-Dichloroethene	ND (5)	Styrene	ND (5)
Methylene Chloride	ND (20)	Bromoform	ND (10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ND (5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND (10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane	йD (5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ND (5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND (10)
Chloroform	ND (5)	2-Chlorotoluene	ND (10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND (10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND (5)
Benzene	ND (5)	t-butylbenzene	ND (5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND (5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND (5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ND (10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
çis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
Toluene	ND (5)	n-Butylbenzene	ND (10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND (20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
1,2-Dibromoethane	ND (5)		
9 Currogate Pecove		ND = Not Detected	

% Surrogate Recovery

1,2 Dicholoroethane-d4	94
Toluene-d8	94
Bromofluorobenzene	94

CLIENT: IDEA DATE REC'D: 07/23/91

PROJECT: Monadnock DATE EXTRACTED: N/A SAMPLE ID: B30-25' DATE ANALYZED: 07/25/91

CONTROL NO: 910772-16 MATRIX : Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESU (ug/k	
Vinyl Chloride	ND (10)	Chlorobenzene	ND	(5)
Bromomethane	ND (20)	1,1,1,2-Tetrachloroethane	ND	(5)
Chloroethane	ND (20)	Ethyl Benzene	ND	(5)
Trifluorochloromethane	ND (10)	Xylenes	ND	(5)
1,1-Dichloroethene	ND (5)	Styrene	ND	(5)
Methylene Chloride	ND (20)	Bromoform	ИD	(10)
t-1,2-Dichloroethene	ND (5)	Isopropyl Benzene	ИD	(5)
1,1-Dichloroethane	ND (5)	Bromobenzene	ND	(10)
cis 1,2-Dichloroethene	ND (5)	1,1,2,2 -Tetrachloroethane		(5)
2,2-Dichloropropane	ND (5)	1,2,3-Trichloropropane	ИD	(5)
Bromochloromethane	ND (5)	n-Propylbenzene	ND	(10)
Chloroform	ND (5)	2-Chlorotoluene	ND	(10)
1,1,1-Trichloroethane	ND (5)	4-Chlorotoluene	ND	(10)
Carbon Tetrachloride	ND (5)	1,3,5-Trimethylbenzene	ND	(5)
Benzene	ND (5)	t-butylbenzene	ND	(5)
1,2 -Dichloroethane	ND (5)	1,2,4-Trimethylbenzene	ND	(5)
Trichloroethene	ND (5)	1,3-Dichlorobenzene	ND	(5)
1,2 -Dichloropropane	ND (5)	sec-Butylbenzene	ИD	(10)
Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND	(5)
Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND	(10)
cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND	(5)
Toluene	ND (5)	n-Butylbenzene	ИD	(10)
t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropan	e ND	(20)
1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND	(20)
Tetrachloroethene	ND (5)	Naphthalene	ND	(20)
1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ИD	(20)
Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND	(10)
1,2-Dibromoethane	ND (5)			
§ Surrogate Recove.	ry	ND = Not Detected		

1,2 Dicholoroethane-d4	96
Toluene-d8	94
Bromofluorobenzene	90

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B31-1' DATE ANALYZED: 07/25/91
CONTROL NO: 910772-17 MATRIX: Soil

RESULTS RESULTS COMPOUND (uq/kq) COMPOUND (uq/kq) Chlorobenzene Vinyl Chloride ND (10) ND (5) Bromomethane ND (20) 1,1,1,2-Tetrachloroethane ND (5) Chloroethane ND (20) Ethyl Benzene ND (5) Trifluorochloromethane ND (10) Xylenes ND (5) 1,1-Dichloroethene ND (5) Styrene ND (5) Methylene Chloride ND (20) Bromoform ND (10) t-1,2-Dichloroethene ND (5) Isopropyl Benzene ND (5) ND (10) 1,1-Dichloroethane ND (5) Bromobenzene cis 1,2-Dichloroethene ND (5) 1,1,2,2 -Tetrachloroethane ND (5) 2,2-Dichloropropane ND (5) 1,2,3-Trichloropropane ND (5) Bromochloromethane ND (5) n-Propylbenzene ND (10) Chloroform ND (5) 2-Chlorotoluene ND (10) 1,1,1-Trichloroethane ND (5) 4-Chlorotoluene ND (10) Carbon Tetrachloride 1,3,5-Trimethylbenzene ND (5) ND (5) Benzene ND (5) t-butylbenzene ND (5) 1,2 -Dichloroethane (5) 1,2,4-Trimethylbenzene ND (5) ND Trichloroethene ND (5) 1,3-Dichlorobenzene ND (5) sec-Butylbenzene 1,2 -Dichloropropane ND (5) ND (10) Dibromomethane ND (5) 1,4-Dichlorobenzene ND (5) Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) cis 1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (5) ND (5) n-Butvlbenzene ND (10) Toluene t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) Tetrachloroethene ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected § Surrogate Recovery 1,2 Dicholoroethane-d4 96 98 Toluene-d8 Bromofluorobenzene 95

CLIENT. TDEA

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: B32-1' DATE ANALYZED: 07/25/91

CONTROL NO: 910772 -18 MATRIX: Soil

COMPOUND	RESULTS (ug/kg)	COMPOUND	RESULTS (ug/kg)
Vinyl Chloride Bromomethane Chloroethane Trifluorochloromethane 1,1-Dichloroethene Methylene Chloride t-1,2-Dichloroethene 1,1-Dichloroethane cis 1,2-Dichloroethene 2,2-Dichloropropane Bromochloromethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride Benzene 1,2 -Dichloroethane Trichloroethene 1,2 -Dichloropropane Dibromomethane Bromodichloromethane cis 1,3-Dichloropropane Toluene t-1,3-Dichloropropane 1,1,2-Trichloroethane Tetrachloroethene 1,3-Dichloropropane	ND (10) ND (20) ND (20) ND (20) ND (5)	Chlorobenzene 1,1,1,2-Tetrachloroethane Ethyl Benzene Xylenes Styrene Bromoform Isopropyl Benzene Bromobenzene 1,1,2,2 -Tetrachloroethane 1,2,3-Trichloropropane n-Propylbenzene 2-Chlorotoluene 4-Chlorotoluene 1,3,5-Trimethylbenzene t-butylbenzene 1,2,4-Trimethylbenzene 1,3-Dichlorobenzene sec-Butylbenzene 1,4-Dichlorobenzene p-Isopropyl toluene 1,2-Dichlorobenzene n-Butylbenzene 1,2 Dibromo-3-chloropropan 1,2,4-Trichlorobenzene Naphthalene Hexachlorobutadiene	ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (10) ND (5) ND (10) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (5) ND (10) ND (5) ND (5) ND (10) ND (5) ND (10) ND (20) ND (20) ND (20)
Dibromochloromethane 1,2-Dibromoethane	ND (5) ND (5)	1,2,3-Trichlorobenzene	ND (10)

ND = Not Detected

% Surrogate Recovery

1,2 Dicholoroethane-d4	94
Toluene-d8	104
Bromofluorobenzene	94

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED: N/A
SAMPLE ID: Method Blank DATE ANALYZED: 07/25/91

CONTROL NO: 910772 MATRIX: Soil

COMPOUND (ug/kg) COMPOUND (ug/kg) Vinyl Chloride ND (10) Chlorobenzene ND (5) Bromomethane ND (20) 1,1,1,2-Tetrachloroethane ND (5) Chloroethane ND (20) Ethyl Benzene ND (5) Trifluorochloromethane ND (10) Xylenes ND (5) Mcthylene Chloride ND (20) Bromoform ND (10) t-1,2-Dichloroethane ND (5) Bromobenzene ND (5) 1,1-Dichloroethane ND (5) Bromobenzene ND (5) 1,1-2-pichloroethane ND (5) 1,1,2,2-Tetrachloroethane ND (5) 2,2-Dichloropropane ND (5) 1,2,3-Trichloropropane ND (5) Bromochloromethane ND (5) 1,2,3-Trichloropropane ND (5) Carbon Tetrachloride ND (5) 4-Chlorotoluene ND (5) 1,2-Dichloroethane ND (5) 1,3,5-Trimethylbenzene ND (5) 1,2-Dichloropropane ND (5) 1,2,4-Trimethylbenzene ND (5) 1,2-Dichloropropane ND (5) 1,2,4-Trimethylbenzene ND (5)<		RESULTS		RESULTS
Bromomethane	COMPOUND	(ug/kg)	COMPOUND	(ug/kg)
Bromomethane	Vinvl Chloride	ND (10)	Chlorobenzene	ND (5)
Chloroethane		•		
Trifluorochloromethane ND (10) Xylenes ND (5) 1,1-Dichloroethene ND (5) Styrene ND (5) Methylene Chloride ND (20) Bromoform ND (10) t-1,2-Dichloroethene ND (5) Isopropyl Benzene ND (5) 1,1-Dichloroethane ND (5) Bromobenzene ND (10) cis 1,2-Dichloropropane ND (5) 1,1,2,2 -Tetrachloroethane ND (5) 2,2-Dichloropropane ND (5) 1,2,3-Trichloropropane ND (5) Bromochloromethane ND (5) n-Propylbenzene ND (10) Chloroform ND (5) 2-Chlorotoluene ND (10) t1,1,1-Trichloroethane ND (5) 2-Chlorotoluene ND (10) Carbon Tetrachloride ND (5) 1,3,5-Trimethylbenzene ND (5) Benzene ND (5) 1,3,5-Trimethylbenzene ND (5) I,2 -Dichloropropane ND (5) 1,2,4-Trimethylbenzene ND (5) Trichloroethene ND (5) 1,3-Dichlorobenzene ND (5) 1,2 -Dichloropropane ND (5) sec-Butylbenzene ND (5) I,2 -Dichloropropane ND (5) 1,4-Dichlorobenzene ND (5) Bromodichloromethane ND (5) 1,4-Dichlorobenzene ND (5) Toluene ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) 1,2-Dichlorobenzene ND (5) Tetrachloroethane ND (5) 1,2-Dichlorobenzene ND (20) 1,1,2-Trichloroethane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobenzene ND (10) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromochloromethane ND (20) 1,2-Dibromochloromethane ND (20)		•	· · · · · · · · · · · · · · · · · · ·	
1,1-Dichloroethene	- ·	•		` '
Methylene Chloride ND (20) Bromoform ND (10) t-1,2-Dichloroethene ND (5) Isopropyl Benzene ND (5) 1,1-Dichloroethane ND (5) Bromobenzene ND (10) cis 1,2-Dichloroethene ND (5) 1,1,2,2-Tetrachloroethane ND (5) 2,2-Dichloropropane ND (5) 1,2,3-Trichloropropane ND (5) Bromochloromethane ND (5) 1,2,3-Trichloropropane ND (10) Chloroform ND (5) 2-Chlorotoluene ND (10) Chloroform ND (5) 2-Chlorotoluene ND (10) Carbon Tetrachloride ND (5) 4-Chlorotoluene ND (5) 1,1-Trichloroethane ND (5) 1,3,5-Trimethylbenzene ND (5) 1,2-Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) 1,2-Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) 1,2-Dichloropropane ND (5) 1,3-Dichlorobenzene ND (5) 1,2-Dichloropropane ND (5) 1,4-Dichlorobenzene ND (5) 1,2-Dichloropropane ND (5) 1,2-Dichlo		, ,		, ,
t-1,2-Dichloroethane ND (5)				, ,
1,1-Dichloroethane ND (5) Bromobenzene ND (10) cis 1,2-Dichloroethene ND (5) 1,1,2,2 -Tetrachloroethane ND (5) 2,2-Dichloropropane ND (5) 1,2,3-Trichloropropane ND (5) n-Propylbenzene ND (10) Chloroform ND (5) 2-Chlorotoluene ND (10) 1,1,1-Trichloroethane ND (5) 4-Chlorotoluene ND (10) 1,1,1-Trichloroethane ND (5) 4-Chlorotoluene ND (10) Carbon Tetrachloride ND (5) 1,3,5-Trimethylbenzene ND (5) 1,2 -Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) 1,2 -Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) Trichloroethene ND (5) 1,3-Dichlorobenzene ND (5) 1,3-Dichlorobenzene ND (5) 1,4-Dichlorobenzene ND (5) 1,4-Dichlorobenzene ND (5) Sec-Butylbenzene ND (5) Sec-Butylbenzene ND (5) Toluene ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) 1,2 Dibromo-3-chloropropane ND (20) Tetrachloroethane ND (5) Naphthalene ND (20) Tetrachloroethane ND (5) Naphthalene ND (20) Dibromochloromethane ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobenzene ND (20) Dibromochloromethane ND (5) Naphthalene ND (20) 1,2-Dibromoethane ND (5) Naphthalene ND (20) Dibromochloromethane ND (5) Naphthalene ND (20) ND = Not Detected				, ,
cis 1,2-Dichloroethene ND (5) 2,2-Dichloropropane ND (5) Bromochloromethane ND (5) Chloroform ND (5) 1,2,3-Trichloropropane ND (5) Bromochloromethane ND (5) Chloroform ND (5) 1,1,1-Trichloroethane ND (5) Carbon Tetrachloride ND (5) Benzene ND (5) 1,2,4-Trimethylbenzene ND (5) 1,2 -Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) Trichloroethene ND (5) 1,3-Dichlorobenzene ND (5) Dibromomethane ND (5) Bromodichloromethane ND (5) Bromodichloromethane ND (5) Bromodichloromethane ND (5) Cis 1,3-Dichloropropane ND (5) Cis 1,3-Dichloropropane ND (5) Toluene ND (5) Toluene ND (5) Toluene ND (5) Toluene ND (5) Toluene ND (5) Toluene ND (5) Toluene ND (5) Toluene ND (5) Toluene ND (5) Toluene ND (5) Tetrachloroethane ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloromethane ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloroethene ND (5) Tetrachloropropane ND (5) Tetrachloroethene	·	• •		• •
2,2-Dichloropropane ND (5) Bromochloromethane ND (5) Chloroform ND (5) 1,1,1-Trichloroethane ND (5) Benzene ND (5) 1,3,5-Trimethylbenzene ND (5) 1,2 -Dichloroethane ND (5) 1,2 -Dichloroethane ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloropropane ND (5) 1,3 -Dichlorobenzene ND (5) 1,4 -Dichlorobenzene ND (5) Bromodichloromethane ND (5) Bromodichloromethane ND (5) Toluene ND (5) Toluene ND (5) 1,2 -Dichloropropane ND (5) Toluene ND (5) 1,2 -Dichloropropane ND (5) Toluene ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Trichloroethane ND (5) 1,2 -Trichloroethane ND (5) 1,2 -Trichloroethane ND (5) 1,3 -Dichloropropane ND (5) 1,3 -Dichloropropane ND (5) 1,2 -Trichloroethane ND (5) 1,2 -Trichloroethane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Trichlorobenzene ND (20) 1,3 -Dichloropropane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dichlorobenzene ND (20) 1,3 -Dichloropenae ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -Dibromochloromethane ND (5) 1,2 -	•	, <i>,</i>		, ,
Bromochloromethane			• • •	• •
Chloroform ND (5) 2-Chlorotoluene ND (10) 1,1,1-Trichloroethane ND (5) 4-Chlorotoluene ND (10) Carbon Tetrachloride ND (5) 1,3,5-Trimethylbenzene ND (5) Benzene ND (5) t-butylbenzene ND (5) Trichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) Trichloroethene ND (5) 1,3-Dichlorobenzene ND (5) 1,2 -Dichloropropane ND (5) sec-Butylbenzene ND (5) Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) Bromodichloropropane ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) n-Butylbenzene ND (5) Toluene ND (5) n-Butylbenzene ND (10) t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) 1,3-Dichloropropane ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (20) 1,2-Dibromoethane ND (5) 1,2,3-Trichlorobenzene ND (10) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88		, ,		` '
1,1,1-Trichloroethane ND (5) Carbon Tetrachloride ND (5) Benzene ND (5) 1,2 -Dichloroethane ND (5) Trichloroethene ND (5) 1,2 -Dichloropropane ND (5) 1,2 -Dichloromethane ND (5) 1,2 -Dichloromethane ND (5) 1,3-Dichloromethane ND (5) Bromodichloromethane ND (5) Toluene ND (5) Toluene ND (5) 1,2-Dichloropropane ND (5) Toluene ND (5) 1,2-Dichloropropane ND (5) 1,2-Dichloromethane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloroethane ND (5) 1,3-Dichloropropane ND (5) 1,3-Dichloropropane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloropropane ND (20) 1,3-Dichloropropane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloropropane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloropropane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloropropane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloropropane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloromethane ND (5) 1,2-Trichlorobenzene ND (20)		, ,		
Carbon Tetrachloride ND (5) Benzene ND (5) 1,2-Dichloroethane ND (5) 1,2-Dichloroethane ND (5) 1,2-Dichloropropane ND (5) 1,2-Dichloropropane ND (5) 1,2-Dichloropropane ND (5) Bromodichloromethane ND (5) Toluene ND (5) 1,2-Dichloropropane ND (5) Toluene ND (5) 1,2-Dichloropropane ND (5) Toluene ND (5) 1,2-Dichloropropane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloropropane ND (5) 1,3-Dichloropropane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloroethane ND (5) 1,3-Dichloropropane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloropropane ND (5) 1,2-Trichloroethane ND (5) 1,2-Trichloropropane ND (5) 1,2-Trichloropropane ND (5) 1,2-Trichloropropane ND (5) 1,2-Trichloropropane ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloropropane ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Dibromoethane ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Dibromoethane ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Dibromoethane ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Dibromoethane ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Dibromoethane ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Trichloropenzene ND (20) 1,3-Dichloropenzene ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloropenzene ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Trichloropenzene ND (20) 1,2-Trichloropenzene ND (20) 1,3-Dichloropenzene ND (5) 1,2-Trichlorobenzene ND (20) 1,3-Dichloropenzene ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Trichloropenzene ND (20) 1,2-Trichloropenzene ND (20) 1,2-Trichloropenzene ND (20) 1,3-Dichloropenzene ND (20) 1,3-Dichloropenzene ND (20) 1,2-Trichloropenzene ND (20) 1,2-Trich	1,1,1-Trichloroethane	, , ,		
Benzene ND (5) t-butylbenzene ND (5) 1,2 -Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) Trichloroethene ND (5) 1,3-Dichlorobenzene ND (5) 1,2 -Dichloropropane ND (5) sec-Butylbenzene ND (10) Dibromomethane ND (5) 1,4-Dichlorobenzene ND (5) Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) cis 1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) n-Butylbenzene ND (5) 1,1,2-Trichloroethane ND (5) 1,2 Dibromo-3-chloropropane ND (20) Tetrachloroethene ND (5) 1,2,4-Trichlorobenzene ND (20) 1,3-Dichloropropane ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88		• •	1,3,5-Trimethylbenzene	
1,2 -Dichloroethane ND (5) 1,2,4-Trimethylbenzene ND (5) 1,2 -Dichloropropane ND (5) sec-Butylbenzene ND (10) Dibromomethane ND (5) 1,4-Dichlorobenzene ND (5) Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) cis 1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) n-Butylbenzene ND (10) t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) Tetrachloroethene ND (5) 1,2,4-Trichlorobenzene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	Benzene	, ,	· ·	, ,
Trichloroethene ND (5) 1,3-Dichlorobenzene ND (5) 1,2-Dichloropropane ND (5) sec-Butylbenzene ND (10) Dibromomethane ND (5) 1,4-Dichlorobenzene ND (5) Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) cis 1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) n-Butylbenzene ND (10) t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) Tetrachloroethene ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	1,2 -Dichloroethane	• •		• •
1,2 -Dichloropropane ND (5) sec-Butylbenzene ND (10) Dibromomethane ND (5) 1,4-Dichlorobenzene ND (5) Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) cis 1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) n-Butylbenzene ND (10) t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) Tetrachloroethene ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88		, ,		
Bromodichloromethane ND (5) p-Isopropyl toluene ND (10) cis 1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (5) Toluene ND (5) n-Butylbenzene ND (10) t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) Tetrachloroethene ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	1,2 -Dichloropropane			
cis 1,3-Dichloropropane ND (5) Toluene ND (5) t-1,3-Dichloropropane ND (5) 1,2-Dichlorobenzene ND (10) t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloroethane ND (5) Tetrachloroethene ND (5) 1,2,4-Trichlorobenzene ND (20) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Dibromochloromethane ND (5) 1,2-Dibromoethane ND (5) 1,2-Trichlorobenzene ND (20) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	Dibromomethane	ND (5)	1,4-Dichlorobenzene	ND (5)
Toluene ND (5) n-Butylbenzene ND (10) t-1,3-Dichloropropane ND (5) 1,2 Dibromo-3-chloropropane ND (20) 1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) Tetrachloroethene ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	Bromodichloromethane	ND (5)	p-Isopropyl toluene	ND (10)
t-1,3-Dichloropropane ND (5) 1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) Tetrachloroethene ND (5) 1,3-Dichloropropane ND (5) 1,3-Dichloropropane ND (5) Dibromochloromethane ND (5) 1,2-Dibromoethane ND (5) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	cis 1,3-Dichloropropane	ND (5)	1,2-Dichlorobenzene	ND (5)
1,1,2-Trichloroethane ND (5) 1,2,4-Trichlorobenzene ND (20) Tetrachloroethene ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	Toluene	ND (5)	n-Butylbenzene	ND (10)
Tetrachloroethene ND (5) Naphthalene ND (20) 1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	t-1,3-Dichloropropane	ND (5)	1,2 Dibromo-3-chloropropand	a ND (20)
1,3-Dichloropropane ND (5) Hexachlorobutadiene ND (20) Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	1,1,2-Trichloroethane	ND (5)	1,2,4-Trichlorobenzene	ND (20)
Dibromochloromethane ND (5) 1,2,3-Trichlorobenzene ND (10) 1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	Tetrachloroethene	ND (5)	Naphthalene	ND (20)
1,2-Dibromoethane ND (5) ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	1,3-Dichloropropane	ND (5)	Hexachlorobutadiene	ND (20)
ND = Not Detected * Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88	Dibromochloromethane	ND (5)	1,2,3-Trichlorobenzene	ND (10)
<pre> § Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88 </pre>	1,2-Dibromoethane	ND (5)		
<pre> § Surrogate Recovery 1,2 Dicholoroethane-d4 95 Toluene-d8 88 </pre>				
1,2 Dicholoroethane-d4 95 Toluene-d8 88			ND = Not Detected	
Toluene-d8 88	<u>* Surrogate Recove</u> :	ry		
Toluene-d8 88	1.2 Dicholoroethane-d4	95		
	Bromofluorobenzene	94		

EPA 335.2 CYANIDE

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED:08/05/91
CONTROL NO: 910772 DATE ANALYZED: 08/05/91

MATRIX: Soil

SAMPLE ID:	CONTROL NO:	RESULTS (mg/kg)	DETECTION LIMIT (mg/kg)
B33~5'	910772-19	ND	2.0
		_ · · _	2.0
B33-10'	910772-20	ND	2.0
B33~15′	910772-21	ND	2.0
B33-20'	910772-22	ND	2.0
B33-25'	910772-23	ND	2.0
B34-5'	910772-24	ND	2.0
B34-10'	910772-25	ND	2.0
B34-15'	910772-26	ND	2.0
B34-20'	910772~27	ND	2.0
B34-25'	910772-28	ND	2.0
B35-5'	910772-29	ND	2.0
B35-10'	910772-30	ND	2.0
B35-15'	910772 - 31	ND	2.0
B35-20'	910772-32	ND .	2.0
B35-25'	910772-33	ND	2.0
B36-5'	910772-34	ND	2.0
B36-10'	910772-35	ND	2.0
B36-15'	910772-36	ND	2.0
B36-20'	910772-37	ND	2.0
B36-25'	910772-38	ND	2.0

EPA 3050/6010 TOTAL CADMIUM

 CLIENT:
 IDEA
 DATE
 REC'D:
 07/23/91

 PROJECT:
 Monadnock
 DATE
 EXTRACTED: 07/29/91

 CONTROL NO:
 910772
 DATE
 ANALYZED:
 07/30/91

MATRIX: Soil

SAMPLE ID:	CONTROL NO:	RESULTS (mg/kg)	DETECTION LIMIT (mg/kg)
B33-5'	910772-19	5.0	0.5
B33-10'	910772-20	5.0	0.5
B33-15'	910772-21	5.0	0.5
B33-20'	910772-22	2.0	0.5
B33-25'	910772-23	2.0	0.5

EPA 3050/6010 TOTAL CHROMIUM

CLIENT: IDEA DATE REC'D: 07/23/91
PROJECT: Monadnock DATE EXTRACTED:07/29/91
CONTROL NO: 910772 DATE ANALYZED: 07/30/91
MATRIX: Soil

RESULTS DETECTION LIMIT SAMPLE ID: CONTROL NO: (mq/kq) (mg/kg) B34-5' 910772-24 30 0.5 B34-10' 910772-25 26 0.5 B34-15' 910772-26 30 0.5 B34-20' 910772-27 8.0 0.5 B34-25' 910772-28 6.0 0.5

EPA METHOD 418.1 TOTAL RECOVERABLE PETROLEUM HYDROCARBONS

CLIPNT: TDEA DATE REC'D: 07/23/91

 CLIENT:
 IDEA
 DATE
 REC'D:
 07/23/91

 PROJECT:
 Monadnock
 DATE
 EXTRACTED:
 07/25/91

 CONTROL NO:
 910772
 DATE
 ANALYZED:
 07/26/91

MATRIX: Soil

 SAMPLE ID:
 CONTROL NO:
 RESULTS (mg/kg)
 DETECTION LIMIT (mg/kg)

 B31-1'
 910772-17
 33
 5

 B32-1'
 910772-18
 76
 5

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910772

METHOD

EPA 335.2

MATRIX:

Soil

SAMPLE ID:

910772-38

COMPOUND

SAMPLE AMOUNT DUP.

RESULTS

SPIKED % REC. % REC.

97

(mg/kg) (mg/kg)

94

<u>RPD</u>

Cyanide

ND

2

3

METHOD

EPA 335.2

MATRIX:

Soil

SAMPLE ID:

910772-28

AMOUNT

COMPOUND

SAMPLE RESULTS

(mq/kq) (mq/kq)

SPIKED & REC.

2

Cyanide

0.1

104

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910772

METHOD

EPA 3050/6010

MATRIX:

Soil

SAMPLE ID:

910772-27

T'NUOMA

DUP.

COMPOUND

SAMPLE RESULTS

<u>SPIKED</u>

% REC.
% REC.

(mg/kg) (mg/kg)

Cadmium

2.0

100

92

5

RPD

METHOD

EPA 3050/6010

MATRIX:

Soil

SAMPLE ID:

910772-27

SAMPLE COMPOUND RESULTS

<u>SPIKED</u> (mg/kg) % REC.

87

DUP. % REC.

RPD

Total Chromium

8.0

(mg/kg)

100

TRUOMA

95

98

2

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910772

METHOD

EPA 8260

MATRIX:

Soil

SAMPLE ID:

910763-09

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT SPIKED (ug/kg)	% REC.	DUP. <u>% REC.</u>	<u>RPD</u>
11-DCE	ND	50	78	84	7
Benzene	ND	50	94	98	4
TCE	ND	50	84	88	2
Toluene	ND	50	94	94	0
Chl. Benzene	ND	50	96	95	1

METHOD

EPA 8260

MATRIX:

Soil

SAMPLE ID:

910772-18

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT <u>SPIKED</u> (ug/kg)	% REC.	DUP. % REC.	RPD
11-DCE	ND	50	81	76	6
TCE	ND	50	96	100	4
Benzene	ND	50	88	88	0
Toluene	ND	50	94	96	2
Chl. Benzene	ND	50	98	97	1

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910772

METHOD

EPA 418.1

MATRIX:

Soil

SAMPLE ID:

Blank

SAMPLE DUP. TRUOMA RESULTS SPIKED % REC. % REC. **RPD** COMPOUND (mg/kg) (mg/kg) ND 50 100 102 2 TRPH

RUB

910748

CLIENT NAME: TOEA ADDRESS: 1132 PHONE NO. 839-17 PROJECT NAME: Ma SEND REPORT TO: 5	radnock eve Mull	igen	CHAIN (REQUI DA PA	EST F		NALYS)		AD			AN	ALYS	ES R	An 630 Tor Tel	alytic Mapl Tance, 213- 213-	al Lal e Ave. Calif. 618-8	90503 889	ries		
John Rean			,	NORM/ RUSH	אנ כ	ว์ า			5 3	8 8	24	52	CAM Metals							
SAMPLE	SAMPLING	PRESER-	CONTAINER	SAMPLE			418.1	M8015	8010/601	809/0808	8240/624	9/02	2 2							
NUMBER	DATE/ŢIME	VATIVE	SIZE/TYPE	WATER	SOIL	OTHER	41	ž		3 8	8	82	5	- -						
B13-5'	7/17/91	none!	hiass tube		Χ_				V											
B13-10'	1		1		1				/											
813-15'									1											
\$13-25' \$13-25' \$14-5'									1											
B13-25'									V											
B14-5'									1											
B14-6									V											
B14-15'																				
B14-201									1											
B14-25'									1											
\$15-5'									\checkmark											
R15-10'																				
B15-15' B15-25' COMMENTS:																				
815-20'																				
B15 - 25'			-		1 1				1						T^{-}	$\int_{-\infty}^{\infty}$		J	I	
		2 1							·						<u> </u>	•				
Relinguished by Signature	Date: 7/7/50	Received by: Stone	ature) Date	e: 7-91	Relinguis	shed by: (Si	gnati	ne)	Date:		Re	ceive	d by:	(Signa	ture)		Date) :		
Company: FRE Y	Time:	Company:	Tim	e: .s~-	Compan	y:			Time:		Co	mpan	ıy:				Time):		



C K Y incorporated Analytical Laboratories

Date: 07/22/91

910748

IDEA

11325 Goldenrod

Fountain Valley CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the laboratory report for samples received on 07/17/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

Method

No. of Analysis

EPA 8010

15 Soils

The results are summarized on four pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

EPA METHOD 8010 **VOLATILE ORGANICS BY GC**

MATRIX TYPE:	IDEA Monadnock Soil			DATE REC'D: DATE ANALYZ		: =========	
SAMPLE ID: CONTROL NO.: 910748	Method Blank	B13-5' -1	B13-10' -2	B13-15' -3	B13-20' -4	B13-25' -5	DETE
PARAMETERS (8010)				RESULT (ug/k	(g)		LIMIT (ug/K
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	ND	ND	20
/inyl Chloride	ND	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	ND	20
richlorofluoromethane	ND	ND	ND	ND	ND	ND	5
,1-Dichloroethene	ND	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	ND	5
Dis-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	5
,1-Dichloroethane	ND	ND	ND	ND	ND	ND	5
hioroform	ND	ND	ND	ND	ND	ND	5
,1,1 -Trichloroethane	ND	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	12	ND	5
,2-Dichloroethane	ND	ND	ND	ND	ND	ND	5
richloroethene	ND	88	ND	ND	19	ND	5
,2-Dichloropropane	ND	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	ND	5
rans-1,3-Dichloropropene	ND	ND	ND	ND	ND	GN	- 5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	- ND	5
,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	5
etrachloroethene	ND	220	27	6	43	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	5
Bromoform	ND	GN	ND	ND	ND	ND	5
,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	5
Chiorotoluene	ND	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	ND	5
)-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
6 Surrogate Recovery:	102	100	103	105	106	106	

PROJECT:	IDEA Monadnock Soll	DATE REC'D: 07/17/91 DATE ANALYZED: 07/18/91 DATE ANALYZED: 07/18/91								
SAMPLE ID: CONTROL NO.: 910748	B145' 6	B14-10' -7	B14-15' -8	B14-20' -9	B14-25' -10	B15-5' -11	DETEC			
PARAMETERS (8010)				RESULT (ug/k	kg)		LIMIT (ug/Ko			
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	20			
Chloromethane	ND	ND	ND	ND	ND	ND	20			
Vinyi Chloride	ND	ND	ND	ND	ND	ND	20			
Bromomethane	ND	ND	ND	ND	ND	ND	20			
Chloroethane	ND	ND	ND	ND	ND	ND	20			
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND ND	20 5			
1,1-Dichloroethene	6	ND	ND	ND	ND	סא	5 5			
Methylene Chloride	ND	ND	ND	ND	ND ND	ND	5 5			
Cis-1,2-Dichloroethene	120	16	ND	ND	ND	ND ND	5 5			
1,1-Dichloroethane	ND	ND	ND	ND	ND					
Chloroform	ND	ND	ND	ND	ND ND	ND ND	5			
1,1,1—Trichloroethane	ND	ND	ND	ND	ND ND	ИD	5			
Carbon Tetrachloride	ND	ND	ND	ND			5			
1,2-Dichloroethane	ND	ND	ND	ND	ND ND	ND	5 -			
Trichloroethene	170	21	ND	ND ND	ND ND	ND ND	5			
1,2-Dichloropropane	ND	ND	ND	ND	ND ND	ND	5 5			
Bromodichloromethane	ND	ND	ND	ND	ND ND	ND ND	5 5			
2-Chloroethylvinylether	ND	ND	ND	ND	ND	DN CN				
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND ON	5			
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND ND	ND ND	5 5			
1.1,2-Trichloroethane	ND	ND	ND ND	ND ND	ND ND		5 5			
Tetrachloroethene	780	78	ND ND	ND		ND				
Dibromochloromethane	ND	76 ND	ND	ND ND	ND	14 ND	5			
Ethylene Dibromide	ND ND	ND	ND ND		ND	ND	5			
Chlorobenzene	ND ND	ND		ND ND	ND	ND	5			
Stilotoberizerie Bromoform	ND		ND ND	ND ND	ND	ND	5			
	ND ND	ND ND	ND ND	ND	ND	ND	5			
1,1,2,2—Tetrachloroethane			ND	ND	ND	ND	5			
Chlorotoluene	ND ND	ND	ND	ND	ND	ND	5			
M-Dichlorobenzene P-Dichlorobenzene	ND ND	ND ND	ND	ND	ND	ND	5			
	ND ND	ND	ND	ND	ND	ND	5			
Benzylchloride O-Dichlorobenzene	ND ND	ND	ND	ND	ND	ND	5			
J-Dictrioroperizene	ND	ND	ND	ND	ND	ND	5			
% Surrogate Recovery:	97	106	114	108	108	104				

PROJECT:	IDEA Monadnock Soil =======		::======	DATE RECEIV DATE ANALYZ	ED: 07/17/91 ZED: 07/18/91
SAMPLE ID:	B15-10'	B15-15'	B15-20'	B15-25'	
CONTROL NO.: 910748	-12	-13	-14	-15	5===0
					DETEC.
PARAMETERS (8010)		RESULT (ug/l	(a)		LIMIT
ANNIETENS (6010)		RESOLI (ug/i	'9)		(ug/Kg)
Dichlorodifluoromethane	ND	ND	ND	ND	20
Chloromethane	ND ·	ND	ND	ND	20
/inyl Chloride	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	20
richlorofluoromethane	6	ND	ND	ND	5
,1 – Dichloroethene	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	5
Cis-1,2-Dichloroethene	ND	ND	ND	ND	5
,1 – Dichloroethane	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	5
,1,1-Trichloroethane	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	5
,2-Dichloroethane	ND	ND	ND	ND	5
Frichloroethene	7	ND	ND	ND	5
,2-Dichloropropane	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	5
rans-1,3-Dichloropropene	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	5
,1,2-Trichloroethane	ND	ND	ND	ND	5
Tetrachloroethene	15	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	5 5
M-Dichlorobenzene	ND	ND	ND	ND	5 5
2-Dichlorobenzene	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND ND	5 5
D-Dichlorobenzene	ND	ND ND	ND	ND ND	5 5
/ 7101 IIOI ODGI IZBI IB	NU	MD	טאו	טאו	J
6 Surrogate Recovery:	104	106	104	108	

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910748

METHOD

EPA 8010

MATRIX:

Soil

SAMPLE ID:

910748-15

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT <u>SPIKED</u> (ug/kg)	% REC.	DUP. % REC.	RPD
1,1 DCE	ND	50	108	112	4
Benzene	ND	50	116	116	0
TCE	ND	50	112	113	1
Toluene	ND	50	106	112	5
Chl. Benzene	ND	50	108	114	5

R3A

1 410714

CLIENT NAME: IDEA ADDRESS: 11325 Golder for Ave PHONE NO. PROJECT NAME: Monadrock SEND REPORT TO: Steve Muligan TURN AROUND TIME NORMAL RUSH REQUEST FOR ANALYSIS ANALYSES REQUIRED CKY incomplication of the property of the proper								tical La aple Av ce, Cali 13-618	aboro e. f. 905 -8889	itories 03										
SAMPLE SAMPLE	SAMPLING		NTAINER :	SAMPLE	DESCRI		418.1	M8015	8010/601	8020/602	8240/624	8270/625	CAM Metals							
NUMBER	DATE/TIME	VATIVE SIZE	ЛҮРЕ	WATER	SOIL	OTHER	4	<u>\$</u>	8	& & ———————————————————————————————————	- 8	- 83	<u>১</u>	- 1				т—	,	,
B16-5'	7/18/91	none bia	is file		X					_	 			_	_		+	┼	<u> </u>	
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116-25'	·								✓ <u> </u>		-	 		_	_		╁	—		
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B17-15'									1		4				_			<u> </u>		
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B18-10'												<u> </u>								
B18-15'									1/											
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Storage/Disposal of Samples: Sample will be stored at CKY for 30 days at no charge and at \$10/sample/month thereafter. Disposal of sample by the Laboratory will be charged at \$10/sample.

ROA

910754

	CLIENT O					OF CU				RD												
	NAME: 105		L_A_		REQ	UEST F DATE: 7/ PAGE 2	OR AN	NALYS	IS						_			Y inco Ivtica	-	ated oratori	cs	
	ADDRESS: //Jar	Golderrod	_Hve	2		DATE: 7/	11/5	<u>L.</u>						U	K		630	Maple ance: (Ave,			[
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1	4	oradrock															rax:	213-0	10-06	10		
}	SEND REPORT TO:	Feur Mul	lies						,							-						
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	SAMPLE NUMBER	SAMPLING DATE/TIME	1	PRESER- VATIVE	CONTAINER SIZE/TYPE	SAMPLE WATER		OTHER	418.1	₩	8	86	8	824	કે ફે	,						į
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C'K Y incorporated Analytical Laboratories

Date: 07/22/91

910754

IDEA 11325 Goldenrod

Fountain Valley CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the laboratory report for samples received on 07/18/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

Method

No. of Analysis

EPA 8010

20 Soils

The results are summarized on five pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

CLIENT: PROJECT: IDEA

DATE REC'D: 07/18/91 DATE EXTRACTED: N/A

CONTROL NO: 910754

MONADNOCK

DATE ANALYZED: 07/18/91

MATRIX TYPE: Soil

SAMPLE ID: CONTROL NO.: 910754	BLANK	B16-5' -1	B16-10' -2	B16-15' -3	B16-20' -4	B16-25' -5	DETEC.
PARAMETERS (8010)			RESULT (u	ıa/ka)			LIMIT (ug/Kg)
(00.00)			,	J J,			(=3/-13/
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	20
Chloromethane	ND	· ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	ND	5
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	ND	5
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Trichloroethene	ND	ND	45	5	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	130	61	10	9	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	ND	5
1,1,2,2—Tetrachloroethane	ND	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
% Surrogate Recovery:	104	103	103	103	107	106	

CLIENT: IDEA DATE REC'D: 07/18/81

PROJECT: MONADNOCK

DATE EXTRACTED: N/A **CONTROL NO: 910754** DATE ANALYZED: 07/18/91

MATRIX TYPE: Soil

SAMPLE ID: CONTROL NO.: 910754	B17-5' -6	B17-10' -7	B17-15' -8	B17-20' -9	B17-25' -10	B18-5' -11	DETEC.
							LIMIT
PARAMETERS (8010)			RESULT (u	ıg/kg)			(ug/Kg)
Dichlorodifluoromethane	ND	ND	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	ND	5
Trans-1,2-Dichloroethene	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	ND	ND	5 ,
Chloroform	ND	ND	ND	ND	ND	ND	5
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	ND	5
Trichloroethene	230	15	ND	ND	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	1100	39	6	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
% Surrogate Recovery:	101	100	104	105	103	98	,

CLIENT: PROJECT: IDEA MONADNOCK

DATE REC'D: 07/18/91 DATE EXTRACTED: N/A

CONTROL NO: 910754

MATRIX TYPE: Soil

DATE ANALYZED: 07/18/91

PARAMETERS (8010) Dichlorodifluoromethane Chloromethane Vinyl Chloride Bromomethane Chloroethane Trichlorofluoromethane 1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethene	-12 ND ND ND ND ND	-13 ND ND ND	-14 RESULT (u	- O.	-16	17	DETEC. LIMIT (ug/Kg)
Dichlorodifluoromethane Chloromethane Vinyl Chloride Bromomethane Chloroethane Trichlorofluoromethane 1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethane Trichloroethane	ND ND ND	ND	ND	- O.			(ug/Kg)
Chloromethane Vinyl Chloride Bromomethane Chloroethane Trichlorofluoromethane 1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethane Trichloroethene	ND ND ND	ND					
Vinyl Chloride Bromomethane Chloroethane Trichlorofluoromethane 1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethene	ND ND			ND	ND	ND	20
Bromomethane Chloroethane Trichlorofluoromethane 1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethene	ND	AID	ND	ND	ND	ND	20
Chloroethane Trichlorofluoromethane 1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethane Trichloroethane		ND	ND	ND	ND	ND	20
Trichlorofluoromethane 1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethane	ND	ND	ND	ND	ND	ND	20
1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethene		ND	ND	ND	ND	ND	20
1,1-Dichloroethene Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethane	ND	ND	ND	ND	ND	ND	5
Methylene Chloride Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethene	ND	ND	ND	ND	ND	ND	5
Cis-1,2-Dichloroethene 1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethane	ND	ND	ND	ND	ND	ND	5
1,1-Dichloroethane Chloroform 1,1,1-Trichloroethane Carbon Tetrachloride 1,2-Dichloroethane Trichloroethene	ND	ND	ND	ND	110	ND	5
Chloroform 1,1,1 – Trichloroethane Carbon Tetrachloride 1,2 – Dichloroethane Trichloroethene	ND	ND	ND	ND	ND	ND	5
Carbon Tetrachloride 1,2-Dichloroethane Trichloroethene	ND	ND	ND	ND	ND	ND	5
Carbon Tetrachloride 1,2-Dichloroethane Trichloroethene	ND	ND	ND	ND	ND	ND	5
1,2-Dichloroethane Trichloroethene	ND	ND	ND	ND	ND	ND	5
Trichloroethene	ND	ND	ND	ND	ND	ND	5
	ND	ND	ND	ND	11	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	ND	ND	ND	7	5
Dibromochloromethane	ND	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	ND	5
	HD	140	140	140	ND	שאו	5
% Surrogate Recovery:	103	104	90	104			

CLIENT: PROJECT: CONTROL NO: MATRIX TYPE:	IDEA MONADNOC 910754 Soil			DATE EXTRACTED DATE ANALYZED:	07/18/91
SAMPLE ID:		B19-15'	B19-20'	B19-25'	
CONTROL NO.: 9	10754	-18	-19	-20	
					DETEC.
					LIMIT
PARAMETERS (8	010)		RESULT (ug/kg)		(ug/Kg)
Dichlorodifluorom	nethane	ND	ND	ND	20
Chloromethane		ND	ND	ND	20
Vinyl Chloride		ND	ND	ND	20
Bromomethane		ND	ND	ND	20
Chloroethane		ND	ND	ND	20
Trichlorofluorome	thane	ND	ND	ND	5
1,1-Dichloroethe	ne	ND	ND	ND	5
Methylene Chlorid	de	ND	ND	ND	5
Cis-1,2-Dichlore	oethene	ND	ND	ND	5
1,1-Dichloroetha	ne	ND	ND	ND	5
Chloroform		ND	ND	ND	5
1,1,1—Trichloroet		ND	ND	ND	5
Carbon Tetrachlo		ND	ND	ND	5
1,2-Dichloroetha	ine	ND	ND	ND	5
Trichloroethene		7	ND	ND	5
1,2-Dichloroprop		ND	ND	ND	5
Bromodichlorome		ND	ND	ND	5
2-Chloroethylvin		ND	ND	ND	5
Trans-1,3-Dichl		ND	ND	ND	5
Cis-1,3-Dichlor		ND	ND	ND	5
1,1,2-Trichloroet		ND	ND	ND	5
Tetrachloroethen		12	ND	ND	5
Dibromochlorome		ND	ND	ND	5
Ethylene Dibromi	ae	ND	ND	ND	5
Chlorobenzene		ND	ND	ND	5
Bromoform		ND	ND	ND	5
1,1,2,2-Tetrachic	proethane	ND	ND	ND	5
Chlorotoluene		ND	ND	ND	5
M-Dichlorobenzo		ND	ND	ND	5
P-Dichlorobenze	ene	ND	ND	ND	5
Benzylchloride		ND	ND	ND	5
O-Dichlorobenze	#I I U	ND	ND	ND	5
% Surrogate Reco	overy:	104	114	110	

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910754

METHOD

EPA 8010

MATRIX:

Soil

SAMPLE ID:

910754-10

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT SPIKED (ug/kg)	% REC.	DUP. <u>% REC.</u>	<u>RPD</u>	
11-DCE	ND	50	98	90	8	
TCE	ND	50	96	95	1	
Chl. Benzene	ND	50	112	112	0	

METHOD

EPA 8010

MATRIX:

Soil

SAMPLE ID:

910754-20

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT SPIKED (ug/kg)	% REC.	DUP. % REC.	<u>RPD</u>	
11-DCE	ND	50	84	91	8	
TCE	ND	50	94	108	14	
Chl. Benzene	ND	50	110	112	2	
=======================================			=======		======	====



C K Y incorporated Analytical Laboratories

Date: 08/06/91

910754

IDEA 11325 Goldenrod Fountain Valley CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the additional laboratory report for samples received on 07/18/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

Method

No. of Analysis

EPA 335.2

5 Soils

The results are summarized on two pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

Lan long (W)

EPA 335.2 CYANIDE

CLIENT: Woodward Clyde Cons.

PROJECT: Monadnock

CONTROL NO: 910754

DATE REC'D: 07/18/91

DATE EXTRACTED:08/05/91

DATE ANALYZED: 08/05/91

MATRIX: Soil

SAMPLE ID:	CONTROL NO:	RESULTS (mg/kg)	DETECTION LIMIT (mg/kg)
B18-5'	910754-11	ND	2.0
B18-10'	910754-12	ND	2.0
B18-15'	910754-13	ND	2.0
B18-20'	910754-14	ND	2.0
B18-25'	910754-15	ND	2.0

CLIENT:

Woodward Clyde Cons.

PROJECT:

Benchmark

CONTROL NO:

910754

METHOD

EPA 335.2

MATRIX:

Soil

SAMPLE ID:

910762-5

SAMPLE AMOUNT DUP. 多 REC. COMPOUND RESULTS SPIKED % REC. <u>RPD</u> (mg/kg) (mg/kg) Cyanide ND 2 97 94 3

A2 910762

	I CLIENT TE A C A			REQUI	TURN AROUND TIME NORMAL NORMAL				C K Y incorporated Analytical Laboratories 630 Maple Ave. Torrance, Calif. 90503 Tel: 213-618-8889 Fax: 213-618-0818 ANALYSES REQUIRED									
	John Real	mes /8/	PRESER- C	CONTAINER	RUSH]	418.1 Man15	8010/601	8020/602	8240/624	3270/625 CAM Metals						
	NUMBER	DATE/TIME	VATIVE S	SIZE/TYPE	WATER	SOIL	OTHER	1 7 3	: 8 : 8		8	<u> </u>						\dashv
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***************************************	Relinguistied by: (Signature	Date: F	Received by Bignati	ure) Date	19-51	Relinguis	hed by (S	ignature) Da	te:	Re	ceived	by: (Sig	gnature)		Date:		
	Company: FREY	Time:	CKY	Time /2	00	Compan			Tir		<u> </u>	mpany:				Time:		
!	Storage/Disposal of Sample	s: Sample will be stored	at CKY for 30 days a	t no charge and	at \$10/san	nple/mon	h thereafte	r Dis po	sal of s	ample b	y the La	borator	y will b	e charge	d at \$10	/sample		



C K Y incorporated Analytical Laboratories

Date: 07/23/91

910762

IDEA

11325 Goldenrod Ave.

Fountain Valley, CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the laboratory report for samples received on 07/19/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

Method

No. of Analysis

EPA 8010

10 Soils

The results are summarized on four pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

CLIENT: PROJECT: IDEA

Monadnock

DATE REC'D: 07/19/91 DATE ANALYZED: 07/20/91

MATRIX TYPE: Soil

SAMPLE ID:	BLANK	B20-5'	B20-10'	B20-15'	B20-20'	
CONTROL NO: 910762		-1	RESULT (ug/	-3	-5	DETECTION
			nesoei (ug/	kg)		LIMIT
PARAMETERS (8010)						(ug/Kg)
						(-9/13/
Dichlorodifluoromethane	ND	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	5
1,1-Dichloroethene	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	5
Cis-1,2-Dichloroethene	ND	ND	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	5
1,1,1-Trichloroethane	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	5
Trichloroethene	ND	ND	ND	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	ND	ND	ND	5
Dibromochloromethane	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	5
Benzylchloride	ND	ND	ND	ND	ND	5
O-Dichlorobenzene	ND	ND	ND	ND	ND	5
S Sioniorosonizono	.10	,,,,	115	110	110	J
% Surrogate Recovery:	116	116	111	108	120	

CLIENT: IDEA DATE REC'D: 07/19/91
PROJECT: Monadnock DATE ANALYZED: 07/20/91

MATRIX TYPE: Soil

SAMPLE ID: CONTROL NO: 910762	B20-25' -6	B21-5' -7	B21-10' -8	B21 – 15' – 9	B21-20' -10	
		•	RESULT (ug/k			DETECTION
PARAMETERS (8010)						LIMIT (ug/Kg)
Dichlorodifluoromethane	ND	ND	ND	ND	ND	20
Chloromethane	ND	ND	ND	ND	ND	20
Vinyl Chloride	ND	ND	ND	ND	ND	20
Bromomethane	ND	ND	ND	ND	ND	20
Chloroethane	ND	ND	ND	ND	ND	20
Trichlorofluoromethane	ND	ND	ND	ND	ND	5
1,1 – Dichloroethene	ND	ND	ND	ND	ND	5
Methylene Chloride	ND	ND	ND	ND	ND	5
Cis-1,2-Dichloroethene	ND	92	ND	ND	ND	5
1,1-Dichloroethane	ND	ND	ND	ND	ND	5
Chloroform	ND	ND	ND	ND	ND	5
1,1,1 - Trichloroethane	ND	ND	ND	ND	ND	5
Carbon Tetrachloride	ND	ND	ND	ND	ND	5
1,2-Dichloroethane	ND	ND	ND	ND	ND	5
Trichloroethene	ND	ND	14	ND	ND	5
1,2-Dichloropropane	ND	ND	ND	ND	ND	5
Bromodichloromethane	ND	ND	ND	ND	ND	5
2-Chloroethylvinylether	ND	ND	ND	ND	ND	5
Trans-1,3-Dichloropropene	ND	ND	ND	ND	ND	5
Cis-1,3-Dichloropropene	ND	ND	ND	ND	ND	5
1,1,2-Trichloroethane	ND	ND	ND	ND	ND	5
Tetrachloroethene	ND	ND	29	10	15	5
Dibromochloromethane	ND	ND	ND	ND	ND	5
Ethylene Dibromide	ND	ND	ND	ND	ND	5
Chlorobenzene	ND	ND	ND	ND	ND	5
Bromoform	ND	ND	ND	ND	ND	5
1,1,2,2-Tetrachloroethane	ND	ND	ND	ND	ND	5
Chlorotoluene	ND	ND	ND	ND	ND	5
M-Dichlorobenzene	ND	ND	ND	ND	ND	5
P-Dichlorobenzene	ND	ND	ND	ND	ND	5 5
Benzylchloride	ND ND	ND	ND	ND ND	ND ND	5 5
O-Dichlorobenzene	ND ND	ND	ND ND	ND ND	ND ND	5 5
	ND	ND	ND	IND	IAD	.
% Surrogate Recovery:	120	119	110	112	111	

CLIENT: IDEA PROJECT: Monadnock MATRIX TYPE: Soil	DATE ANAL	DATE REC'D: 07/19/91 DATE ANALYZED: 07/20/91			
SAMPLE ID: CONTROL NO: 1910762	B21 - 25' -11				
	RESULT (ug/kg)	DETECTION LIMIT			
PARAMETERS (8010)		(ug/Kg)			
Dichlorodifluoromethane	ND	20			
Chloromethane	ND	20			
Vinyl Chloride	ND	20			
Bromomethane	ND	20			
Chloroethane	ND	20			
Trichlorofluoromethane	ND	5			
1,1-Dichloroethene	ND	5			
Methylene Chloride	ND	5			
Cis-1,2-Dichloroethene	ND	5			
1,1-Dichloroethane	ND	5			
Chloroform	ND	5			
1,1,1 - Trichloroethane	ND	5			
Carbon Tetrachloride	ND	5			
1,2-Dichloroethane	ND	5			
Trichloroethene	ND	5			
1,2-Dichloropropane	ND	5			
Bromodichloromethane	ND	5			
2-Chloroethylvinylether	ND	5			
Trans-1,3-Dichloropropene	ND	5			
Cis-1,3-Dichloropropene	ND	5			
1,1,2-Trichloroethane	ND	5			
Tetrachloroethene	ND	5			
Dibromochloromethane	ND	5			
Ethylene Dibromide	ND	5			
Chlorobenzene	ND	5			
Bromoform	ND	5			
1,1,2,2-Tetrachloroethane	ND	5			
Chlorotoluene	ND	5			
M-Dichlorobenzene	ND	5			
P-Dichlorobenzene	ND	5			
Benzylchloride	ND	5			
O-Dichlorobenzene	ND	5			
% Surrogate Recovery:	110				

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910762

METHOD

EPA 8010

MATRIX:

Soil

SAMPLE ID:

910762-09

COMPOUND	SAMPLE <u>RESULTS</u> (ug/kg)	AMOUNT <u>SPIKED</u> (ug/kg)	% REC.	DUP. % REC.	<u>RPD</u>
11-DCE	ND	50	129	129	0
TCE	ND	50	127	123	3
Chl. Benzene	ND	50	109	118	8



CKY incorporated Analytical Laboratories

Date: 08/06/91

910762

IDEA

11325 Goldenrod Ave.

Fountain Valley, CA 92708

Attn: Mr. Steve Mulligan

Subject: Laboratory Report

Project: Monadnock

Enclosed is the additional laboratory report for samples received on 07/19/91. The samples were received in coolers with ice and intact; the chain-of-custody forms were properly filled out. The data reported includes:

Method

No. of Analysis

EPA 335.2

6 Soils

The results are summarized on two pages.

Please feel free to call if you have any questions concerning these results.

Sincerely,

Dr. Kam Pang

Laboratory Director

EPA 335.2 CYANIDE

 CLIENT:
 IDEA
 DATE REC'D: 07/19/91

 PROJECT:
 Monadnock
 DATE EXTRACTED:08/05/91

 CONTROL NO:
 910762
 DATE ANALYZED: 08/05/91

MATRIX: Soil

SAMPLE ID:	CONTROL NO:	RESULTS (mg/kg)	DETECTION LIMIT
B20-5'	910762-1	ND	2.0
B20-10'	910762-2	ND	2.0
B20-15'	910762-3	ND	2.0
B20-15G	910762-4	ND	2.0
B20-20'	910762-5	ND	2.0
B20-25′	910762-6	ND	2.0

CLIENT:

IDEA

PROJECT:

Monadnock

CONTROL NO:

910762

METHOD

EPA 335.2

MATRIX:

Soil

SAMPLE ID:

910762-5

SAMPLE THUOMA DUP. COMPOUND % REC. RESULTS SPIKED 者 REC. **RPD** (mg/kg) (mg/kg) Cyanide ND 2 97 94 3